

Charles University in Prague
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DIPLOMA THESIS

Schwa-centred Approach towards Pronunciation Teaching

Výuka výslovnosti z pohledu neutrální samohlásky šva

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I hereby declare that this diploma thesis is completely my own work and that no other sources were used in the preparation of the thesis than those listed on the works cited page.

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ABSTRACT

This diploma thesis deals with the crucial impact of the neutral vowel schwa on creating prominence contrasts in English pronunciation teaching, i.e. a schwa-centred approach. The theoretical part focuses on the complex description of the target sound with regard to the suprasegmental level, including Czech speakers' difficulties to recognise and pronounce this vowel and prominence patterns it participates in. Furthermore, it defines the essence of the schwa-centred approach. The practical part presents the implementation of the schwa-centred approach in teaching practice in the form of a set of activities aimed at perception, production and raising students' awareness of this phenomenon. The effectiveness of the activities is evaluated by means of the analysis of audio recordings made before and after the teaching and assessment of students' questionnaires. The thesis also contains all worksheets with task descriptions applying the schwa-centred approach.

KEY WORDS

schwa, full vowel, prominence contrasts, perception, production, raising awareness

ABSTRAKT

Tato diplomová práce se zabývá klíčovou rolí neutrálního vokálu šva v nahlížení na prominenční vzorce ve výuce anglické výslovnosti (a schwa-centred approach). Teoretická část se zaměřuje na komplexní popis cílové hlásky s přesahem do suprasegmentální roviny včetně problémů českých mluvčích rozpoznat a vyslovit tuto samohlásku. Dále definuje přístup k výuce výslovnosti, kde šva slouží jako východisko pro různé výslovnostní jevy. Praktická část předkládá implementaci tohoto přístupu do výukové praxe formou sady aktivit zacílených na percepci, produkci a zvyšování povědomí studentů o tomto jevu. Efektivita aktivit je zjištěna prostřednictvím rozboru audionahrávek a vyhodnocení dotazníků pro studenty. Součástí práce jsou také pracovní listy pro učitele s popisem aktivit aplikujících zmíněný přístup.

KLÍČOVÁ SLOVA

šva, plná samohláska, prominenční kontrasty, percepce, produkce, zvyšování povědomí

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INTRODUCTION

The topic of the present diploma thesis stems from Poesová's research directed at the impact of systematic pronunciation training on the perception and production of schwa (Vliv 2012) and her study "Under the Baton of Schwa" (2015) in which she establishes a so-called schwa-centred approach. It can be described as a set of recommendations for teaching the neutral vowel schwa, word stress and rhythm. These three important aspects of English pronunciation, which bear no similarities to the Czech language, are natural sources of struggles for Czech students of English. However, when these features are taken into consideration by a teacher during English lessons, they are often introduced and practised separately. Nevertheless, the vowel schwa helps to generate prominence contrasts which contribute to the creation of natural English rhythm. Thus, Poesová advocates that Czech students of English should be instructed on the interactive nature of schwa with higher units of the English sound system.

The aim of this study is to implement the schwa-centred approach towards pronunciation teaching in a real classroom and to verify its effectiveness. The theoretical part deals with the phonetic and phonological aspects of this approach and introduces common pronunciation problems of Czech students of English based on the differences between the Czech and English sound systems. It further elaborates on the significance of pronunciation teaching, sums up general pronunciation teaching tenets and specifies the teaching implications of the schwa-centred approach.

The practical part presents the research and formulates a hypothesis based on the previous theoretical foundation. The research can be divided into two stages – the pre-experiment stage involves the creation of a measuring instrument for comparing the level of respondents' pronunciation before and after the experiment, and describes the design of a battery of activities aimed at practising the target pronunciation features. The second stage examines the impact of the pronunciation training on students' controlled speech production by a careful listening analysis of the students' recordings and by the assessment of students' questionnaires.

The thesis is supposed to be of benefit to English teachers by elaborating on the importance of teaching schwa in relation to the above-mentioned suprasegmental features and by providing them with a set of user-friendly activities which can immediately be employed in an English classroom and easily adapted to any language aspects.

THEORETICAL PART

1. PHONETIC AND PHONOLOGICAL ASPECTS OF THE SCHWA-CENTRED APPROACH

This chapter introduces the basic building blocks of the schwa-centred approach, namely schwa, lexical stress and rhythm, and how closely they are interrelated. It also compares these features with their Czech counterparts which are frequently the cause of learners' incorrect pronunciation.

1.1. Schwa

Phonetically speaking, schwa is described as a neutral mid central lax vowel. The term *neutral* refers to the position of the lips which are neither spread nor rounded. The properties *mid* and *central* depict the tongue position, specifically how high the tongue is and which part of the tongue is involved when the sound is produced (Celce-Murcia 115). While pronouncing schwa, the tongue is in the middle of the mouth, neither high nor low, neither front nor back, and the jaw is slightly open (Celce-Murcia 131). *Lax* implies that the sound is articulated with less muscle tension than its longer *tense* counterpart /ɜː/.

As Skaličková suggests, this vowel is typical of its large number of variants since it is susceptible to its surrounding context to a larger extent than full vowels (94). One of the three most important allophones is the non-final variant, which is similar to the isolated realization of the phoneme (e.g. *relative* /'relətɪv/, *miserable* /'mɪzərəbəl/) and which tends to disappear in multisyllabic words (e.g. *considerable* /kən'sɪdərəbəl/ → /kən'sɪdrəbəl/) and before syllabic consonants (e.g. *social* /'səʊʃəl/ → /'səʊʃl/). Furthermore, under the influence of the velar consonants /k/, /g/ and /ŋ/, the tongue may be slightly more raised towards the back of the oral cavity as in *back again* /'bæk ə'geɪn/ or *long ago* /'lɒŋ ə'gəʊ/. The third significant variant is typical of word-final position, where schwa may display features of /ʌ/-colouring, for instance *collar* /'kɒlə/ or *deliver* /dɪ'lɪvə/, which can appear even more tangible in words ending with <a>, e.g. *China* /'tʃaɪnə/ or *sofa* /'səʊfə/ (Skaličková 94-95; Cruttenden 117-118).

Apart from that, Ogden draws our attention to the notion of *vowel harmony* which means that “vowels in a stretch of speech share some phonetic property” (74). He illustrates this phenomenon on the phrases *to the* [tə ðə] *park* and *to the* [tə ðə] *hill*. The schwas in the former example reflect the backer quality of the word *park* while the word *hill* influences the schwas with its front quality (Ogden 74).

From the phonological point of view, schwa’s distinctive function can be proved by its ability to create minimal pairs either with zero vowel, e.g. *waiter* x *wait*, or with unaccented /ɪ/, e.g. *accept* x *except* (Cruttenden 117). Nevertheless, the distribution of these two vowels is not so clear-cut since they can vary freely in certain expressions, for instance, in words beginning with unstressed *be-*, *pre-* or *re-* (e.g. *before* /bɪ'fɔ:/, /bə'fɔ:/), in suffixes such as *-ible* (*possible* /'pɒsɪbl/, /'pɒsəbl/) and in some words ending with *-ace*, *-ate*, *-ain*, *-et* (e.g. *private* /'praɪvɪt/, /'praɪvət/) (Skaličková 83). The choice of one or the other option depends entirely on the speaker’s preference. To be more specific, GB (General British) speakers of middle and younger generations increasingly tend to use /ə/ in non-final unstressed syllables, where /ɪ/ used to be more traditional (Cruttenden 99).

Nowadays, schwa is more common in words with suffixes *-ity* (/ətɪ/ rather than /ɪtɪ/, as in *sincerity*, *quality*), *-ily* (/əli/ rather than /ɪli/, as in *primarily*, *easily*), *-ate* (/ət/ rather than /ɪt/, as in *fortunate*, *chocolate*), *-ible* (/əbl/ rather than /ɪbl/, as in *possible*, *visible*) and *-em* (/əm/ rather than /ɪm/, as in *problem*, *system*) (Cruttenden 99-100). On the other hand, /ɪ/ remains dominant in words with suffixes *-age* (e.g. *marriage*, *village*), *-et*, especially following /k, g, tʃ, dʒ/ (e.g. *pocket*, *target*, *hatchet*, *budget*) and in words beginning with *be-* (e.g. *between*, *believe* etc.) (ibid.). In any case, the contrast is “mostly restricted to citation forms, while being suspended in most instances of connected speech” (Giegerich 285).

When we look at possible positions of schwa within words and the grapheme to phoneme correspondences, schwa can occur in any position (initial, medial and final), and it is represented by a wide range of orthographic forms, namely <a> *along*, <ar> *particular*, <ai> *Britain*, <e> *silence*, <er> *offer*, <o> *condemn*, <or> *tutor*, <oar> *cupboard*, <ou> *famous*, <our> *colour*, <u> *difficult*, <ure> *figure*, <yr> *martyr*, <i>

possible, or <re> *theatre* (Skaličková 95). The most frequent spellings of /ə/, with the exception of the weak forms of grammatical words, are: <a> 30%, <o> 24%, <e> 13%, and <er> 12% (Cruttenden 117).

As we can see, many of the above-mentioned graphemes contain the letter <r> which may also be reflected in *r*-colouring of the schwa in rhotic accents, as in General American (GA) and south-west England (compare *offer* in GB /'ɒfə/ and GA /'ɑ:fɹ/ (Cruttenden 118). In non-rhotic accents, the word-final /r/-sound is realised only in connected speech when the following expression is pronounced with a vowel in the initial position (this pronunciation feature is called *linking r*). Thus, in the phrase *My sister hates me* the grapheme <er> will be pronounced as /ə/ while in the clause *My sister is beautiful* the /r/-sound will be realised to link the preceding vowel with the following one and to create a smooth transition.

A similar feature, called *intrusive r*, can be perceived in GB pronunciation even in cases where an expression ends with schwa and the following one starts with a vowel but there is no <r> present in the spelling to avoid the clash of two neighbouring vowels (e.g. *law and order* /'lɔ:r ənd 'ɔ:də/).

The fact that the phoneme /ə/ has no direct counterpart in standard Czech presents one of the major sources of difficulties for Czech students of English with regard to its pronunciation. It is used in Czech only when saying certain letters of the alphabet (e.g. /bə/, /kə/, /sə/ etc.) or in non-standard reduced pronunciation (e.g. pronouncing *protože* as /prətəže/ instead of /protože/) which is characteristic of a more intimate conversational style or fast speech rate (Cvrček et al. 44). Besides, schwa's longer counterpart /ɜ:/ is often applied to express hesitation (so-called *hesitating sound*) (ibid.). It follows that Czech students of English are mostly able to produce the target sound as such. What causes struggling is, among other reasons, the idiosyncratic nature of English spelling where schwa does not correspond to a single grapheme.

In contrast to English, the nature of the Czech orthography is phonographic, meaning that the relationship between phonemes and graphemes is much more straightforward. In addition to this fact, Czech speakers produce full vowels in all syllables irrespective

of stress (Palková 34) and they are prone to transferring this principle to the English sound system. Furthermore, schwa is very often filtered through the sieve of Czech vowels /i, e, a, o, u/ and perceived as full vowels (Poesová, “Under the Baton” 33). Full vowel perception and production tends to be reinforced by the graphic form. To exemplify this issue, words such as *control*, *o’clock* may bear /ɒ/-colouring, *across*, *about* may reflect /e/-colouring and /ʌ/-colouring may be heard in words like *sofa* or *China* (Poesová, *Vliv* 79). This tendency may result in different word stress placement, too.

1.2. Word stress and vowel reduction

Czech students of English struggle not only with the distribution of schwa but also with the placement of word stress, both of which are considerably connected. The stress in Czech words always falls on the first syllable. Hence, its function is primarily delimitative, meaning it signals word boundaries (Palková 277). Additionally, it is not able to distinguish the semantic meaning of lexical items (*ibid.*). On the contrary, the word stress in English is not tied to any particular syllable within words in general.

At the same time, it has to be pointed out that English word stress is fixed in the sense that it is attached to a certain syllable within a specific word (with some exceptions, determined by the larger rhythmic pattern of the total context) (Cruttenden 201). This phenomenon can be illustrated on the words *finish* /'fɪnɪʃ/ and *behind* /bɪ'haɪnd/ where the former example is stressed on the first syllable while the latter is stressed on the second syllable and we cannot shift the stress unless it is required by the rhythmical structure of the context to avoid the clash of two successive stressed syllables. In Giegerich’s words, “stress is instrumental in the maintenance of rhythm in connected speech” (181).

Furthermore, stress in English may have a distinctive function in determining the syntactic category, for instance, *accent* /'æksənt/ is a noun, whereas *accent* /ək'sent/ is a verb (Giegerich 180). Thus, it appears that the characteristic of English stress is fundamentally different from the Czech word stress and teachers of English should not disregard its importance in pronunciation teaching.

When examining the area of stress, the nature of unstressed syllables should not be neglected. Unstressed syllables are of two kinds: those with reduced vowels, schwa being the most frequent peak, but we can also find full vowels in unstressed positions (e.g. *technology* /tek'nɒlədʒi/). It follows that a strong syllable may or may not be stressed, whereas a stressed syllable must be strong at all times. To sum up, unstressed schwa stands in opposition to full vowels in stressed syllables. This contrast results in prominence patterns where the stressed syllables stand out from the neighbouring parts, whereas the unstressed segments tend to be much subtler. Of course, stress should not be perceived as a binary phenomenon since syllables may have different degrees of stress (consider the word ,*intro'duction* where the third syllable carries primary stress, the first syllables bears secondary stress and the second and fourth syllables are totally unstressed) (Giegerich 67).

The factors that generate stress are pitch, loudness, quality and quantity (Cruttenden 202). Despite the fact that they usually work together, they are not equally important. The strongest effect is supposed to be produced by pitch, sometimes assisted by extra loudness (Roach 86; Cruttenden 203). In comparison with the higher, longer and louder nature of full vowels in stressed syllables, schwa is perceived as being lower, shorter and quieter. Nonetheless, we should not neglect the vowel quality which plays the crucial role in distinguishing between a full vowel and a reduced vowel, schwa being the most frequent result of vowel reduction but not the only. Weak /i/ and /u/ represent other results of vowel reduction in English. “Indeed, the reduced vowels are so lacking in prominence that they have a high frequency of occurrence in unaccented as opposed to accented syllables, /ə/ occurring only in unaccented syllables” (Cruttenden 203).

Compared to English, Czech vowels maintain full quality irrespective of position in a word, i.e. vowel reduction does not occur in standard Czech (Šindelářová 207). The process of vowel reduction in English is necessitated by the rhythmical structure (described in more detail in section 1.3.) which can be demonstrated on the stress shift from the first to the second syllable in words *courage* and *courageous* /'kʌrɪdʒ/ → /kə'reɪdʒəs/. The full vowel quality in the first syllable of *courage* undergoes vowel reduction to schwa in *courageous*. Thus, schwa (or /i/, /u/) becomes an important (non)-

prominence indicator since it considerably helps stressed parts stand out in the speech signal and create prominence contrasts crucial for smoother word recognition and message decoding (Poesová, “Under the Baton” 32).

The traditional view perceives the process of vowel reduction as centralization, meaning that most vowels approach schwa (i.e. the centre of vocal tract) in unstressed positions. A movement in the opposite direction is suggested by a more recent theory which sees vowel reduction as contextual assimilation (Kondo 63). In other words, schwa is believed to be subject to coarticulation with surrounding segments. “In either case, vowels do not reach their target value (*target undershoot*) and end up having a value more like their surrounding segments (*assimilated*) or having a value less extreme or peripheral (*centralized*)” (ibid.).

Kondo conducted an experiment in which three male British speakers read a list of sentences with various VCəCV sequences. The results showed that neither vocalic nor consonantal effects on the first formant (*F1* correlates with tongue *height*) were great which proves that schwa may be targetted in F1 values. By way of contrast, the extent of variation observed in the second formant (*F2* correlates with *backness*) of schwa, especially due to consonantal context (to a lesser degree due to transconsonantal vowels), was large. It indicates that schwa is targetless in F2 which confirms both hypotheses – centralization and contextual assimilation are interrelated (Kondo 70-71).

So far, it has been stated that vowel reduction is associated with the lack of stress and contextual influence. Still, there is another criterion which has to be taken into consideration, namely the rate of utterance (Lindblom, “Spectrographic Study” 1774). In his study, Lindblom measured formant frequencies and duration of eight Swedish vowels uttered by a male talker in three consonantal environments under varying time conditions. He claims that our articulators respond to control signals smoothly and quite slowly (not step by step) owing to physiological limitations. If these signals follow one after another in close temporal sequence, the articulators may be reacting to several signals simultaneously which results in coarticulation. Thus, as a vowel becomes shorter, there is less time for the speech organs to reach the target vowel position (*vowel undershoot*) (Lindblom, “Spectrographic Study” 1778-1779). In brief, it is not

physiologically possible for the same articulatory movements to be performed in syllables of different lengths.

Flemming adds that, quite logically, the faster the articulators must move the more effort has to be expended to perform these movements, which contradicts speech economy (6). “The production of a vowel involves moving from the preceding segment to the position for the vowel, and then moving the articulators on to the position for the following segment.” (ibid.). Hence, to minimize the effort in speech organs during the transition between a vowel and consonant, the vowel contrasts tend to be neutralized (ibid.).

Lindblom further investigates vowel reduction from the perspective of speech behaviour. His H&H (*hypo-* and *hyperarticulation*) theory suggests that speakers tune their performance according to communicative and situational demands. To be more specific, they can minimise the articulatory effort, or hypoarticulate, only in so far as effortless understanding is ensured on the part of the listener which can be enhanced by background knowledge or non-linguistic information (Lindblom “Explaining” 403). To avoid unintelligibility, lexical items have to be sufficiently discriminable so that the listener is able to distinguish the contrasts and obtain lexical access (Lindblom, “Explaining” 405). Contrarily, if ideal conditions for communication are disrupted by undesirable circumstances (e.g. lack of knowledge, poor acoustics, disease etc.), speakers tend to hyperarticulate to provide maximum acoustic information (Lindblom, “Explaining” 418). Therefore, it would appear that communication is governed by two competing forces – minimisation of the articulatory effort and preservation of lexical distinctiveness – and that speakers have a choice in the extent of reductions.

Harris also views vowel reduction as “part of planned speech behaviour rather than an accidental by-product of vocal-organ inertia” (130). Speakers are able to direct listeners’ attention to information-heavy prominent positions by hyperarticulation. On the other hand, syllables bearing old or less significant information tend to be hypoarticulated (ibid.).

Current research in the area of word stress and vowel reduction

The issues of word stress and vowel reduction have been investigated in several Czech studies which examined the perception and production of English language by Czech advanced students. Skarnitzl analysed identification of English lexical stress by Czech students in words taken from recordings of the BBC World Service news bulletins. The results showed that the degree of difficulty in recognizing the stressed syllable in English isolated words correlated to a considerable extent with the expert assessment of the stressed syllable's prominence.

The following acoustic analysis of the selected words looking for objective justification discovered that all acoustic parameters observed (that is intensity, duration and fundamental frequency) affect stress identification. Students misinterpreted the stress especially in situations where one or more acoustic parameters were missing or were stronger in other positions. For instance, in the stressed syllable of the word *resolution*, the phonologically long /u:/ was shortened due to the following fortis obstruent and its duration was very similar to that of the short /e/ in the first syllable which was incorrectly identified as the stressed syllable. In short, the results suggested that obscure prominence was the most frequent cause of wrong stress recognition (Skarnitzl 183-194).

The second study focussed on durational reduction of vowels in four-syllable English words (where alternation of strong and weak elements can be naturally expected) read by British and Czech speakers who were evaluated as having strong Czech accent (Skarnitzl et al. 17). The results verified the Czech English trend not to contrast stressed and unstressed syllables by lengthening the former and shortening the latter. Instead, they equalize the vowel length (Volín "Rhythmical" 291).

A follow-up analysis examined the spectral properties of schwa in the form of perception analysis (Volín and Poesová 21). Concerning the spectral attributes, the words with initial stress (*Germany, militant*) exhibited either complete or at least 50% accuracy in producing schwa while the words with the stress on the second syllable (*another, conditions*) displayed zero or at most 34% accuracy, despite the fact that the

Czech English temporal patterns of the words with second-syllable stress were not profoundly different from the British English ones (Volín and Poesová 27). In brief, Czech speakers are able to pronounce schwa in certain positions, whereas in others not, probably due to the existence of Czech equivalents in some cases.

Additionally, vowel reduction does not present a problem solely for Czech learners of English. For instance, “the Spanish vowel space has an empty central area with no central vowel categories” (Lacabex et al. 293). This fact, together with the influence of orthography among others, causes that the schwa sound tends to be assimilated to L1 vowel sounds by Spanish speakers and therefore perceived and produced as a peripheral full vowel (ibid.).

As far as German is concerned, it shares a number of properties with English since they are both considered stress-timed languages (Crystal 8), both distinguish stressed and unstressed syllables in terms of quality and quantity and dispose of the short central vowel schwa. Still, the distribution of schwa in German appears to be more restricted (Sönning 164). In his study, Sönning investigated the production of vowels in unstressed syllables by advanced German learners of English in comparison with native speakers of Standard Southern British English (163). The results show positive transfer from German in the durational measurements of unstressed vowels which were very similar to the native speakers’ vowel duration (Sönning 170). Nonetheless, the differences were found in vowel quality which had not been sufficiently reduced (ibid.). Moreover, the findings indicate that the lack of deprominencing of unstressed vowels is higher in pre-stress position than in post-stress position (ibid.).

This section has described how closely schwa and word stress are related. Schwa, which occurs exclusively in unstressed syllables, helps the stressed parts to become more prominent in the speech signal. Moreover, it appears even more frequently in connected speech where vowels in syllables lacking primary stress become shorter. It implies that the shorter the duration of a vowel, the less time the articulatory organs have to reach the target vowel. In order to economise on the energy expended by the articulators, the short unstressed vowels are reduced, in most cases to schwa. On the other hand, vowels should be reduced only as long as smooth communication is retained. By creating

prominence contrasts, speakers also have control of shifting listeners' attention from less important information towards newer and more significant facts. All in all, learners should be careful to make the appropriate reduction of unaccented vowels since they may be misunderstood if the relative prominence of the syllables is incorrect (Cruttenden 216). Finally, we have also drawn attention to several Czech empirical studies which provided evidence about the problematic issues in Czech English pronunciation. Such findings hold significance for English language teaching since they are based on the analyses of real-life sound material (Poesová, *Vliv* 85).

1.3. Rhythm and weak forms

The previous section has touched upon the fact that the process of vowel reduction is largely affected by the rhythmical structure of the English language which is quite distinct from the Czech rhythm. Traditionally, two broad language categories have been distinguished regarding the rhythmical nature, namely stress-timed and syllable-timed languages (Crystal 8). The former term suggests that the stressed syllables occur at regular intervals, English being assumed to belong to this group, whereas the latter term implies that all syllables fall at regular time intervals, whether they are stressed or not (which is the case of Czech) (*ibid.*).

However, it has been pointed out that such distinction should be understood as a scale rather than a divide since languages vary greatly in the amount of stress-timing or syllable-timing they employ (*ibid.*). Additionally, isochrony has not been instrumentally proved (Cruttenden 227; Roach 123). Thus, it would appear more appropriate to view stress-timing as the alternation of stressed syllables (with full vowels) and unstressed (i.e. reduced) syllables (Pardo 11).

The interval stretching from the onset of one stressed syllable to the onset of the next stressed syllable is called a foot (Giegerich 259). Since the stress may be placed on any syllable in a word (unlike in Czech where the stress falls on the first syllable of a word and thus usually marks the beginning of a single semantic unit), the English foot can start and end in the middle of a semantic unit which may confuse the students of English while listening to spoken English (Skaličková 171). They search for a separate

meaning in a certain foot which is not present under these circumstances (ibid.). For instance, the foot /'pɪəriəl rɪ/ is utterly incomprehensible unless we know the context of adjacent feet /ɪm'pɪəriəl rɪ'spɒns/ (ibid.).

Furthermore, rhythm affects longer stretches of spoken language including polysyllabic words, phrases and sentences. “Some parts of the connected utterance will be made to stand out from their environment, in the same way that certain syllables of a polysyllabic word are more prominent than their neighbours” (Cruttenden 225). The rhythmical nature of English may thus cause the loss of stress in a syllable that is stressed in a citation form but becomes unstressed and therefore reduced (mostly to schwa) in connected speech (e.g. veto /'vi:təʊ/ → *veto the proposal* /'vi:təðəprə'pəʊzəl/) (Giegerich 285).

Although lexical words generally retain the quantitative pattern of their isolated form, many function words (such as auxiliary verbs, prepositions, conjunctions etc.) have two or more qualitative and quantitative patterns according to whether they are stressed (*strong forms*) or unstressed (*weak forms*), the latter being the more common case (Cruttenden 227-228). For instance, the word *that* is pronounced strongly in the sentence *I like that* /aɪ 'laɪk ðæt/ but weakly in *I hope that she will* /aɪ 'həʊp ðət ʃi 'wɪl/ (Roach 102). There are contexts where only the strong form is acceptable and others where the weak form is the normal pronunciation (ibid.).

The fact that the phenomenon of weak forms does not exist in Czech, as unstressed positions do not become reduced in the standard variety, does not make English learning any easier. Unfortunately, most native speakers perceive all-strong-form pronunciation as unnatural and foreign-sounding and, more importantly, speakers who are not familiar with the use of weak forms are likely to have difficulty understanding the native speakers (ibid.). Hence, teachers of English should introduce the weak forms of function words as the appropriate pronunciations and draw students' attention to the typical situations where strong forms can be used.

Another problematic feature for Czech students is that the English rhythm may move the stress in a word to a completely different syllable (*stress shift*) to avoid a succession

of weak syllables in connected speech (Cruttenden 210). It can be demonstrated, for example, on the word *Chi'nese* which is stressed on the second syllable but the stress is shifted to the first syllable in the phrase '*Chinese* 'restaurant (Cruttenden 254) in order to elude the clash of two stressed syllables. A word's stress pattern may also be modified by the process of derivation as in *com'pare* but '*comparable* (Cruttenden 211).

The previous sections have presented how schwa interacts with higher units of the English sound system. The specific make-up of the English rhythm requires creating prominence patterns in connected speech, where the more dominant syllables retain full vowels, whereas other elements are reduced, in most cases to schwa. Therefore, schwa helps the stressed segments to stand out both at the word and sentence level. Since, as it has been pointed out, schwa does not exist in the standard variety of the Czech language and the system of lexical stress and rhythm is utterly different in English, such features often hinder English learners' perception and production of the English language (Poesová, "Under the Baton" 33). The knowledge of these phenomena and their functioning in speech is vital for comprehending the schwa-centred approach, which is elaborated on in Chapter 2.

2. PRONUNCIATION TEACHING

In the previous chapter, we looked into the nature of phonetic and phonological aspects crucial for understanding the schwa-centred approach. The present chapter is more didactically orientated since it demonstrates the effectiveness of pronunciation teaching based on several experimental studies, and it also summarises the essential principles related to pronunciation teaching in general and the factors that teachers need to bear in mind when teaching pronunciation. Finally, it discloses the core aspects of the schwa-centred approach and its teaching implications.

2.1. The effectiveness of pronunciation teaching

Varying amounts of attention have been devoted to pronunciation teaching by different pedagogical approaches. “Current approaches to pronunciation instruction combine the influences of communicative and audio-lingual approaches” (Grant 4) both of which see teaching pronunciation as an inseparable constituent of language teaching in general. Although students often consider pronunciation a significant part of language learning, their wish is not always reflected in classroom practice and pronunciation teaching tends to be neglected for the following reasons.

Firstly, many experienced teachers admit to lack the theoretical knowledge as well as necessary practical classroom skills and thus they do not feel confident enough to teach their students about this area (Kelly 13). Secondly, even if they may possess the essential theoretical and practical knowledge, their concern with grammar and vocabulary tends to take precedence (Kelly 13; Pardo 12). Thirdly, when pronunciation teaching is not overlooked, it appears to be reactive to a particular problem that has arisen in the classroom rather than being strategically planned (*ibid.*). Students might be frustrated if they fail to understand their interlocutor or get their message across due to their incorrect pronunciation, especially more so if they have a good command of other aspects of language such as vocabulary and grammar (Hewings 10-11). Therefore, English teacher training study programmes should provide thorough training in both phonetic and phonological theories and their application in the classroom, and they

should stress the significance of pronunciation teaching for successful communication in the target language.

As it has been mentioned, the communicative approach and audio-lingual method emphasise the inclusion of pronunciation in the teaching process. Despite that, these two methodologies focus on different goals. The audiolingual method placed a high priority on both grammatical and pronunciation accuracy and most pronunciation classes concentrated on intensive aural-oral drills designed to help students acquire a native-like accent, even though this would be achieved by relatively few learners (Grant 2). Fortunately, the communicative approach sets a rather more realistic goal, i.e. intelligible pronunciation (Celce-Murcia 9).

Intelligibility refers to the extent to which a speaker's utterances are understood by the interlocutor (Grant 230). This term is closely connected with the notion of comprehensibility, which represents the degree of effort required on the part of the listener to comprehend the speaker (ibid.). A lack of intelligibility may be caused by various factors, depending largely on the learner's mother tongue. These involve substitution of one sound for another one, sound deletion, sound insertion, lengthy pauses, rate of speech, but more importantly incorrect word stress and irregular alternation of stressed and unstressed syllables (Kenworthy 18-19).

“Many pronunciation practitioners argue for putting equal or greater emphasis on the suprasegmental aspects of language, claiming that teaching students about English rhythm, stress, and intonation contributes more to increased intelligibility than focussing on segmentals” (Grant 232). It follows that since these aspects of pronunciation bear no resemblance to the Czech language (see Chapter 1), they should be given priority in the classroom. Regardless of that, it does not mean that we should not pay attention to individual sounds either; however, “we should teach segmentals selectively, with a view toward those phonemic contrasts that most impede our learners' intelligibility and carry the greatest functional load” (Grant 232).

Last but not least, Grant claims that if we do not understand a message, we tend to blame the person who is speaking (11). Nevertheless, it has to be pointed out that

intelligibility is a process which functions two ways as it involves not only the speaker but also the listener. It should not come as a surprise that Czech students of English will probably understand the Czech English accent better than, for instance, the French English accent if they are exposed more often to the former. Therefore, we should focus not only on what the speaker needs to do to be understood easily, but also on what the potential listener needs to understand (Grant 12). Training listeners' ears and raising their awareness of significant pronunciation features is thus crucial.

To confirm the above-mentioned assumptions, several studies investigating the effectiveness of pronunciation teaching will now be presented. Derwing, Munro and Wiebe compared the effects of three different types of instruction on the speech of three groups of ESL learners (393-410). The first group was trained in segmental accuracy, whereas the second group focussed on general speaking habits and prosody (i.e. speaking rate, rhythm, word stress, sentence stress). The last group did not receive any specific pronunciation instruction, serving as the control group. Both the former groups were taught pronunciation for approximately 20 minutes a day (out of 4 hours of English learning a day) a period of 12 weeks. Both teachers employed similar techniques and tried to maintain balance in practising perception and production.

The pre-test and post-test consisted in recording the participants' speech production while reading a list of sentences and telling an improvised narrative description of a picture story. While both groups which received the pronunciation training showed improvement in comprehensibility and foreign accent reduction at the level of sentence reading, only the global group evinced progress in fluency and comprehensibility during spontaneous speech. The segmental instruction directed more attention to the form which was manifested in the controlled production of a list of sentences. On the other hand, spontaneous speech requires more concentration on other aspects (such as lexical choice, syntax and discourse organisation) for which the global group was better equipped (Derwing et al. 406).

Another study, investigating the value of systematic and explicit incorporation of a pronunciation sub-syllabus within the overall syllabus, was carried out by Couper (53). It involved raising students' awareness of their difficulties with pronunciation and

instructing them in segmental and suprasegmental features of spoken English to encourage self-rehearsal and self-monitoring. The participants underwent approximately 2 hours of pronunciation practice per day within their English course (18 hours a week) for a period of 16 weeks. The effectiveness of the syllabus was measured through pre- and post-course tests, in which the students were asked to read a list of sentences and to talk about themselves for 2 minutes. Surveys of students' reactions to the syllabus and their opinions on pronunciation teaching/learning were also taken into account. The results indicated significant improvement in accuracy in both controlled and spontaneous speech production tasks. Additionally, the data gained from the surveys showed that an explicit approach to teaching pronunciation was valued by the vast majority of students. The reason for certain opposed views may be that explicit approach is suitable and beneficial merely for particular types of learners.

Last but not least, Wrembel scrutinised the effectiveness of a twelve-week pronunciation programme exploring the role of metacompetence in the acquisition of foreign language phonology ("Empirical" 985). Her study was based on the assumption that learners who are subject to explicit theoretical training in phonetics and phonology outperform those who did not receive such input. The programme was conducted among first-year students of English at the Teacher Training College in Poznań, Poland. A group of thirty-one students participated in a specially designed pronunciation course, which provided training in both receptive and productive skills. The control group underwent the same training, only without being provided with additional theoretical instruction in English phonetics and phonology, involving articulatory descriptions, classification of phonemes, elements of contrastive analysis etc. Pronunciation was practised in isolation from other skills for 4 hours a week and covered 50 teaching hours in total.

The participants were assessed before and after the training according to their performance in a perception test and three production tests ranging from form-focussed to meaning-focussed. The initial hypothesis was fulfilled only partially since statistically significant results were obtained in more controlled tasks (i.e. reading a list of words/phrases and a dialogue) at which the experimental group outperformed the

control group. Nonetheless, the results did not reveal any substantial impact of the training on perception and more content-focussed production tasks. As Wrembel points out, it may only mean that the newly learnt target feature has not been automatised yet or that a relevant processing mechanism is not accessible (“Empirical” 988). Notwithstanding, the study demonstrated that the subjects’ overall phonetic accuracy had improved thanks to explicit pronunciation training, which implies that foreign language teachers should incorporate theoretical phonetics and phonology instruction in their lessons.

As has been shown, explicit instruction does play a crucial role in pronunciation improvement. Certain students may achieve intelligible pronunciation only by being exposed to rich input from the target language. Unfortunately, Czech students of English do not usually have sufficient contact with native speakers. That could be compensated for by long-term systematic pronunciation training which can lead to significant progress not only in controlled speech production activities, but also in spontaneous speech. Training suprasegmentals in particular may enhance learners’ performance in communicative aspects of spoken language. Moreover, students may also benefit from the theoretical knowledge of phonetics and phonology. Nevertheless, in order to implement pronunciation instruction into regular English classes, teachers need to possess the knowledge of phonetics and phonology themselves and have at their disposal a battery of effective activities which would suit their learners’ needs.

2.2. Pronunciation teaching principles

2.2.1. Factors influencing learning and teaching pronunciation

Teachers should bear in mind that different students achieve intelligible pronunciation by expending different amounts of effort, which can be affected by classroom practice to a large degree. Still, certain factors cannot be controlled by the teacher or learner, particularly regarding learners’ mother tongue, their age and phonetic ability. As far as the influence of the native language is concerned, Kenworthy claims that the more discrepancies there are between L1 and L2, the more difficulties the learner will have in the target language (4). Although the transfer from L1 to L2 can also be positive, it is useful for pronunciation teachers to be aware of the contrasts between learners’ L1 and

the target language as it helps to raise learners' consciousness about the dissimilarities (Grant 237). Since Czech and English differ greatly in the suprasegmental system, which appears to have substantial impact on intelligibility, it is vital for the teachers to possess the knowledge of these aspects and pay attention to them in the classroom practice.

If we take into consideration the age of learners, it is likely that "the earlier the learner's exposure to native speakers of the target language, the better the acquisition of phonology" (Celce-Murcia 35). Acquiring foreign language phonology is qualitatively different from acquiring syntax and lexicon in children and adults, and thus there are young learners of English who achieve very good pronunciation, yet have serious gaps in grammar and lexicon (*ibid.*). Conversely, there are adults who master English syntax and lexicon, but have problems with pronunciation (*ibid.*).

According to some researchers, the period of life during which maximal conditions for language acquisition still exist is called the critical period (usually said to be between 10 and 13 years of age) and after that the ability to acquire a native-like accent decreases rapidly (Celce-Murcia 16, Kenworthy 6). On the other hand, "the importance of the critical period is somewhat downplayed today, and the claim that adults cannot achieve native-like pronunciation in a second language is not infrequently countered with anecdotes about successful adult second-language learners" (Celce-Murcia 17).

Furthermore, it is widely believed that some people have a "better ear" for foreign languages than others (Kenworthy 6). In other words, each learner is endowed with a certain amount of "aptitude" or "phonetic coding ability", which determines a speaker's ability to discriminate between two sounds and/or mimic sounds accurately (*ibid.*). It implies that for students with poor phonetic coding ability, it does not suffice to imitate sounds during drilling exercises (Kenworthy 7). Consequently, teachers need to design more sophisticated activities and raise learners' awareness of relevant aspects of pronunciation in order to achieve success with respect to both perception and production.

As Grant points out, the rest of the factors affecting learners' pronunciation, namely the target language exposure, the use of the target language outside the classroom, identity, attitude and motivation, can be addressed via the classroom practice (236). Firstly, it is obvious that most Czech learners of English study the language at school and therefore their exposure to English is often limited to teachers' speaking and the recordings that they play to the students. Fortunately, thanks to the existence of the internet and other mass media, learners, especially the younger generation, can receive large amounts of input through watching various videos, TV series or films online, reading blogs oriented on students' favourite leisure activities, downloading easily accessible English e-books, communicating with people from other countries in English etc.

This way the teachers have the opportunity to exert a powerful influence which can be accomplished through diversity of tasks that teachers assign to their students (e.g. sharing links to authentic listening sources, streaming video, having them conduct outside-of-class surveys that require them to interview native speakers, creating projects which involve using the target language etc.) (Grant 236-237). Besides, it is crucial for the students to be exposed to authentic, real-life language as well as a variety of voices, accents and contexts (ibid.).

Secondly, pronunciation is closely bound up with affective factors, i.e. identity, attitude and motivation. Regarding social and individual identity, people's accents express their membership to particular communities (Dalton and Seidlhofer 7). As a result, "second language learners often resist acquiring certain features of the target language that they perceive to threaten their identity" (Grant 236). Some students thus may favour to retain their foreign accent deliberately. On the other hand, if the learner wishes to be accepted by the native-speaker community as a fully-fledged member, he or she is likely to adapt his or her accent to that of the native-speaker community (Dalton and Seidlhofer 7). Hence, teachers should not force students into eradicating their foreign accents, but rather assist them in modifying their accents in ways that do not disrespect their L1, home culture, or identity (Grant 233).

The notion of identity is closely related to learners' attitude towards the L2. Those learners who show positive feelings towards the speakers of the new language tend to

develop more accurate, native-like accents (Kenworthy 8). Such positive feelings are typically linked with integrative motivation. The term means that the language learner is willing to be integrated into the new speech community and is genuinely interested both in the speakers and their culture (ibid.). The other extreme position refers to instrumental motivation which reflects the practical advantages of learning a language, for instance, a job promotion (Dalton and Seidlhofer 11; Celce-Murcia 21).

Teachers can influence these three aspects to a considerable extent by their enthusiastic attitude, creating encouraging atmosphere and their teaching methods. For instance, to reduce potential stress, which can result in muscular tension and stiffened articulators, teachers should incorporate relaxation and breathing exercises, articulatory warm-ups or drama voice techniques to build confidence and develop control over the articulatory organs (Wrembel, “Metacompetence” 197). Besides, all the above-mentioned factors influencing L2 learners’ pronunciation are interconnected and teachers should not approach them in isolation.

2.2.2. Two approaches to teaching pronunciation

It has been noted that if pronunciation instruction is included in language teaching, it often responds to a particular problem which has occurred during the lesson. Nonetheless, just as other areas of L2 curriculum, i.e. grammar and vocabulary, pronunciation teaching should be planned for as well. Generally, we distinguish two main approaches towards pronunciation teaching, specifically *segregated* and *integrated* approach (Thornbury 185). The former treats pronunciation in isolation from other language areas and the typical exercise is the minimal pairs task, in which learners are taught to discriminate and produce two contrasted sounds (e.g. *hit* x *heat*) (ibid.). Contrarily, the latter approach deals with pronunciation as part of teaching grammar and vocabulary, or speaking and listening (ibid.).

Due to the interrelatedness between pronunciation and skills/sub-skills, experts agree that pronunciation can no longer be taught in a “vacuum” apart from other areas of the curriculum (Celce-Murcia 365). It follows that while planning English lessons, teachers should consider which pronunciation features are relevant to particular grammatical structures and vocabulary. Such preparation may also help teachers predict possible

difficulties which students may encounter during the learning process. Besides, as Kelly suggests, “integrating pronunciation teaching fully with the study of grammatical and lexical features has the further incremental benefit that learners will increasingly appreciate the significance of pronunciation in determining successful communication” (14).

2.2.3. Recommended stages of pronunciation teaching

When teaching pronunciation, teachers should take into consideration not only students’ sound production but also perception. Firstly, learners’ attention should be drawn to the associated articulatory features (e.g. the position of the organs of speech, vocal cords vibration etc.) (Celce-Murcia 45). For instance, in the case of the sound schwa, teachers may point out the neutral position of articulators. Secondly, students need to learn to perceive L2 sounds adequately; otherwise they can be filtered through the grid of one’s L1 (Wrembel, “Metacompetence” 192). At early stages of the process, learners may not be able to clearly hear sounds that do not exist in their L1 and thus may feel frustrated if asked to produce them (Celce-Murcia 46).

Therefore, teachers are advised to train students’ ears to new sounds and raise their consciousness about the importance of the sound system through listening discrimination exercises, during which students are asked to identify the new feature or distinguish it from other similar features (*ibid.*). As for learning about the word stress, students may be asked to count the number of syllables in a word and mark the stressed one.

Czech students of English often deem authentic speech overly fast and complicated, especially due to vowel reduction and weak forms, which may cause words to differ from their citation forms to a considerable extent. Since these suprasegmental aspects do not exist in the standard variety of the Czech language, they present a serious problem for most learners. Consequently, perception exercises focussed on the suprasegmental areas may aid students in decoding the speech. Additionally, a learner’s ability to perceive L2 sounds leads to significant improvement in production of the L2 sounds (Celce-Murcia 46).

Once students have reached a certain comfortable level in distinguishing sound contrasts in the target language, teachers can proceed to controlled practice activities, which draw students' attention to accurate production of the target feature (Celce-Murcia 47). Activities requiring focus on form and accuracy involve repetition practice, oral reading of minimal pairs or short sentences, tongue twisters, Jazz Chants or children's rhymes (ibid.).

According to Celce-Murcia, the next phase – guided practice – should aim at both accuracy and fluency (47). In such tasks, learners are already provided with context and much of the language; nevertheless, more emphasis is put on expressing meaning by adding specific information, such as personal details or students' ideas (ibid.). Activities that fall into this stage are cued dialogues, simple information-gap exercises and sequencing tasks (e.g. strip stories) (ibid.).

Unfortunately, students often struggle with applying the newly acquired features in real communication since they must find words to express the intended meaning, make grammatical decisions, and, at the same time, manage difficult articulations and unfamiliar prosodic patterns (Lane 11). It follows that teachers should offer their students communicative practice by establishing a context in which a particular feature of pronunciation is called for and allow students to create their own language in that context (Lane 12). In other words, communicative activities compel the students to negotiate meaning while attending to form, which can aid them to use the new pronunciation feature more automatically. Communicative activities involve, for example, story-telling, role play, interviews, debates or problem solving (Celce-Murcia 48).

Naturally, it is almost impossible and also undesirable to perform all the stages during a single lesson as students need time to acquire a new feature and automatise it. Therefore, this process should be extended over the course of several lessons (Celce-Murcia 45).

2.2.4. Evaluating pronunciation practice

The role of systematic feedback as part of all the aforementioned phases is absolutely vital. It is also important that students develop self-monitoring and self-correction skills, because pronunciation improvements are gradual and piecemeal, spreading from a more limited use of a new pronunciation to a wider use (Lane 12). The suitable time for providing feedback may vary, depending on the activity. It has the most direct and immediate form during controlled practice, where the goal is accuracy (Grant 235). In guided or communicative practice, the focus shifts gradually to meaning, in which case feedback may be delayed until after the activity in order not to interrupt the flow of speech (*ibid.*). Feedback may come not only from the teacher, but also from peers, which gives them additional monitoring practice (Lane 15). All in all, students need to be informed about the accuracy of their performance as they sometimes cannot tell themselves if they pronounce the target feature correctly. Nevertheless, teachers should be sensible while correcting the learners so as not to overwhelm them and threaten their confidence.

2.2.5. Developing phonological metacompetence

Apart from drawing students' attention to their errors, it is also significant to make them understand what caused them; in other words, raise their awareness of the particular aspects of the English sound system. "Learners need to know what to pay attention to and what to work on" (Kenworthy 2). For instance, they may not realise that wrong stress placement can affect their message. Celce-Murcia thus agrees on a strong positive correlation between the metaphonological awareness and the comprehensibility of speech (34). We have already seen the positive results of teaching metacompetence in Wrembel's experiment in the previous sub-chapter. In another study, Wrembel interprets phonological metacompetence as a multilevel construct, consisting of the following blocks: (1) metalinguistic consciousness, (2) explicit formal instruction, and (3) first language competence ("Metacompetence" 193).

The first subcomponent, i.e. *metalinguistic consciousness*, includes conscious noticing and making a comparison between the observed phonetic input and learners' own production at the level of perception. It also implies consciousness at the level of speech

production during controlled/monitored tasks and a deliberate choice of learning strategies which correspond to individual students' learning styles. Finally, it consists in the newly acquired theoretical knowledge of phonetics and phonology.

The second subcomponent, i.e. *explicit formal instruction*, involves theoretical training in phonetics and phonology, which should also provide reflective feedback on students' performance and supply them with effective self-monitoring and self-correction techniques in order to encourage the learning process outside the classroom.

Lastly, L2 metacompetence appears to benefit from students' *first language competence* in forming hypotheses about the target language. As Wrembel suggests, "making learners aware of the 'competences' they already possess may thus constitute a methodological remedy targetted at suppressing the L1 interference and reinforcing the L2 acquisition as such" ("Metacompetence" 194).

To sum it up, phonological metacompetence may act as a facilitator of intake by conscious noticing of specific characteristics of L2 sounds. Furthermore, it can serve as an acquisition facilitator by deciphering underlying intentions and preventing the mapping into the L1, and finally, it operates as a monitoring device, exercising control of the output ("Metacompetence" 194-195).

Wrembel further proposes a multifarious range of techniques for the development of phonological metacompetence, varying from alternative, innovative activities involving extra- and paralinguistic features (e.g. gestures, mimicry or relaxation) aimed at nurturing the command of articulators, to mainstream methods focussed on conscious analysis of theoretical knowledge ("Metacompetence" 197).

In accordance with her model, students should initially experience the so-called sensitisation, i.e. perceptual tuning into the language. In other words, learners first need to get used to the overall auditory impact of the L2, before they listen for a specific element ("Metacompetence" 200). Other techniques involve discussions on the role of a particular pronunciation feature in communication, humming pitch movements instead of using words, recognising moods, kinaesthetic involvement in teaching suprasegmentals, relaxation techniques (breathing exercises), visualisation etc. (ibid.).

In short, this stage is vital for making students aware of how they perceive the L2 and may help them to suppress their prejudices and therefore make their language egos more permeable (ibid.).

The tasks consisting in a higher measure of elaboration include articulatory warm-up exercises, drama voice techniques, which appear to build self-esteem and confidence, and imitation/oral mimicry activities developing a more native-like ‘voice quality’ (i.e. specific pitch level, vowel space, tongue position, degree of muscular activity) (“Metacompetence” 201). Although Wrembel admits that these innovative methods lack extensive empirical validation and their practical applications are fairly limited, they play a crucial role in influencing the affective factors. In brief, they may help eliminate tension and stress, create positive atmosphere and enrich classic pronunciation tasks (“Metacompetence” 202).

The mainstream techniques include presenting theoretical foundations, developing discriminatory skills (through contrastive exercises, guided listening etc.) as well as self-monitoring and self-correction techniques to develop self-rehearsal strategies (e.g. talking to oneself, audio- or videotaping presentations) and self-study guidelines.

The tasks which represent the highest level of elaboration regard multimedia learning aids and advanced technologies offering animated views of the articulators during speech, videotaping learners’ mouths during speech production and analysing the articulatory positions afterwards, recording students’ utterances and comparing a visual display of their own intonation contours with pre-recorded models or analyses of spectrograms (“Metacompetence” 204). Some of the techniques proposed by Wrembel will serve as an inspiration for creating the pronunciation teaching programme described in the practical part.

This subsection has outlined the most vital principles and tenets which teachers need to take into account in teaching different aspects of pronunciation. In line with communicative language teaching, teachers should bear in mind that suprasegmentals contribute more to the development of fluency than segmentals and therefore should be given priority in pronunciation learning. Furthermore, most attention should be paid to

those features that inhibit students' intelligibility. We have also discussed the factors which influence learners' pronunciation to various degrees, specifically their mother tongue, age, phonetic ability, the target language exposure, the use of the target language outside the classroom, identity, attitude and motivation. Moreover, attention has been drawn to the significance of promoting both perception and production through a generally accepted teaching model, starting with form-focussed activities, moving to more meaning-based tasks and ending with providing effective feedback on students' performance. Finally, we have stressed the role of raising students' awareness of phonetics and phonology in acquiring intelligible pronunciation and shared tips on how to accomplish it. All of these aspects and assumptions will be taken into consideration in the practical part of the work.

2.3. Schwa-centred approach

The schwa-centred approach is not a scientifically verified approach, but rather a set of tips or recommendations which take the phoneme schwa as a central point in teaching prominence patterns (Poesová, "Under the Baton" 30). It has been discussed earlier that production of schwa in isolation does not usually present a problem for Czech students. However, it is its distribution in connected speech which may cause struggles. As it has been mentioned in Chapter 1, schwa is the main outcome of vowel reduction which enables stressed parts to stand out from the rest. Since English and Czech stress systems do not coincide, the former being wholly unpredictable for a Czech speaker with the experience of a fixed-stressed mother tongue and a very limited space for vowel reduction, students face difficulties at the level of perception as well as production (Poesová, "Under the Baton" 33).

Czech learners of English tend to perceive schwa through the filter of Czech vowels, which may lead to problems in coping with the natural flow of continuous speech where schwa typically occurs in unstressed positions and weak forms of function words (*ibid.*). From the production point of view, Czech learners frequently substitute schwa with full vowels, which may result in insufficient differentiation of vowels in stressed and unstressed syllables and the lack of prominence contrasts (*ibid.*). Students should therefore be taught about the interrelatedness of these aspects (schwa, word stress,

vowel reduction, rhythm, weak forms) as they seem to have the largest impact on students' intelligibility (Grant 232). As Poesová points out, aside from practising these sound properties, teachers should focus on raising awareness of the occurrence of schwa and its graphic counterparts, too (*Vliv* 79).

2.3.1. How the schwa-centred approach to teaching pronunciation evolved

The topic of the current thesis stems from Poesová's research aimed at the influence of systematic pronunciation training on the perception and production of schwa. It was conducted in two parallel groups of lower-secondary classes and involved approximately 50 pupils (*Vliv* 88). The participants were around 13 years of age at the time of the experiment and had 4 English classes a week. They had been studying English for 5 years and their level of English within the group was similar. The teaching programme was preceded by both perception and production pre-test. The perception part concentrated on vowel identification and discrimination at word and sentence level, word stress identification, spotting vowel differences and counting missing words, while the production part consisted in recording each learner's production for about five minutes, including reading individual words, repeating words and a limerick, reading sentences and picture description) (*Vliv* 92-93).

The experiment itself lasted three months and involved a battery of activities focussed on teaching the process of vowel reduction. The activities were carried out as three- to five-minute tasks three times a week, usually at the beginning of English lessons. Practising schwa was mostly incorporated in activities revising grammar and vocabulary having been taught previously. The author also tried to balance the distribution of segmental and suprasegmental aspects, i.e. word and sentence stress, weak forms of grammatical words and rhythm, in which vowel reduction plays crucial role (*Vliv* 98). The chief emphasis in all the activities was put on illustrating the potential of schwa to co-create prominence contrasts between stressed and unstressed syllables or strong and weak forms at the word and sentence level in perception as well as production (*ibid.*).

The total number of 29 activities was created for this purpose. The first two activities introduced the sound schwa with its transcription and the main functions, using

discovery activities. The rest of the tasks concentrated on the identification of schwa in words and phrases, word stress, sentence stress, weak forms with schwa and rhythm. The number of activities focussed on these individual aspects was balanced and the same was applied to the number of activities directed at perception, production or both at the same time. The language material consisted in the majority of cases of isolated words and phrases, but certain activities were also contextualized, allowing simple conversations (*Vliv* 106). Poesová adds that the activities could be considered as schwa-centred to a certain extent since word stress and rhythm were viewed and explained via schwa (*Vliv* 108).

The results of the perception post-test showed improvement in the area of schwa discrimination in two-syllable words and weak forms of grammatical words (*Vliv* 118). In short, the schwa training resulted in higher perceptual sensitivity to vowel reduction in certain contexts. Despite that, the results in the production area were less conclusive. A positive impact of the experiment was indicated only in the temporal domain of vowel reduction in a limited number of items (*Vliv* 156). However, the difference in duration was usually not supported by the substitution of full vowels with schwa (*ibid.*).

The remaining prominence parameters, i.e. pitch and intensity, were not utilized at all (*ibid.*). This fact is hardly surprising, considering the results of different studies which indicate frequent absence of schwa in weak forms of function words even in proficient students' speech (Lane 73). In brief, the pronunciation training appeared to be more beneficial at the level of perception. Apart from that, it also prompted certain changes in the area of production, namely expressing prominence contrasts through temporal modifications. The author admits that if the training had been longer and more intensive, the temporal reduction might have been marked by the obscuration of vowel quality more consistently (Poesová, "Under the Baton" 35). Besides, the specific nature of English spelling could have had a damaging influence on the results as well.

2.3.2. Principles of the schwa-centred approach

Poesová establishes and further elaborates on the schwa-centred approach in her study "Under the Baton of Schwa" (2015). It has been remarked that the essence of this approach is the potential of schwa to interact with higher units of the sound system,

which should be emphasised and systematically worked with (“Under the Baton“ 35). Teachers are merely recommended to draw students’ attention to schwa while teaching word stress and rhythm, and highlight the function of schwa in creating prominence contrasts (ibid.). Naturally, all these aspects can be practised separately at first as long as their mutual relationship is clarified at some point. In spite of that, the author underscores that it is not the isolated production of schwa which induces difficulties for Czech speakers (“Under the Baton“ 36). In fact, it is the inability to reduce in the right place and to suppress the dissimilarities between spoken and written language. Therefore, these sound properties should be practised together as soon as possible.

A small-scale research of contemporary English textbooks available in the Czech Republic was carried out in order to verify the interconnectedness of schwa with suprasegmental features. It was revealed that the examined properties of the English sound system had been treated separately in the vast majority of samples (Poesová, “Under the Baton” 36). The present author investigated the same issue in a minor follow-up research. Five English textbooks published after 2010 were chosen at random and the pronunciation sections were scrutinised. This inquiry seems to suggest similar conclusions.

For instance, the course book *Global* (Clandfield, 2010) focuses primarily on segmentals. The remaining pronunciation exercises practise schwa, word stress and rhythm independently. Another textbook, *Life* (Stephenson, 2013) definitely pays more attention to sentence stress and weak forms; however, the connection with the neutral vowel schwa is not made clear at all. The pronunciation activities presented in the students’ book called *Straightforward* (Kerr and Jones, 2013) are considerably scarce and concentrate mainly on intonation. As far as word and sentence stress are concerned, they are demonstrated in merely one activity each. Although the pronunciation tasks in the textbook named *Insight* (Hancock, P., 2013) are more developed than in the previous book, since they ask students to identify the most common sound in unstressed syllables and explain that schwa occurs in weak forms of grammatical words, these activities are rather brief and superficial, and aim at perception only.

The only textbook which indicates a minor sign of schwa-centredness is *English File* (Latham-Koenig and Oxenden, 2013). The course book contains a reading exercise with 5 sentences where the unstressed syllables/words are written in smaller font-size than the stressed syllables, and the positions which should be reduced to schwa are in pink letters. Moreover, the syllables carrying primary stress are underlined. A question emerges, though, whether the pink colour may help learners obscure the full vowel quality and not vice versa. It may seem more beneficial to write the schwa symbol instead as we will explain later. Otherwise, a couple of other exercises with similar graphics can be found there, but they focus solely on stressed and unstressed syllables/words without paying attention to schwa. To sum up, it would appear that any systematic work on the relationship between schwa and higher phonological units is lacking in the randomly selected research sample of English textbooks published between 2010 and 2013.

Returning back to the schwa-centred approach itself, Poesová suggests five stages in developing students' awareness of the English vocalic system where schwa is contrasted to the other vowel sounds in such a way that it can immediately or later be related to the notion of prominence patterning ("Under the Baton" 32).

Step 1 *Exploration of the oral cavity (observing the tongue and lip movements)*

/ə æ ə œ ə œ/ /ə u: ə u: ə u:/ /a: ə a: ə a: ə/ /i: ə i: ə i: ə/

Step 2 *Supplying words and phrases containing the practised sequences*

/dʒə 'pæn/ /fə 'sæm/ /bə 'lu:n/ /ət 'nu:n/ /bə 'na:nə/ /hə 'ti:tʃə/

Step 3 *Introducing the prominence principle (schwa in unstressed syllables, full vowels usually in stressed)*

/dʒə 'pæn/ /bə 'lu:n/ /bə 'na:nə/ /'ti:tʃə/

Step 4 *Drawing students' attention to prominence properties (auditory point of view)*

quieter, lower, shorter (schwa) vs louder (full vowel), higher, longer

Step 5 Establishing the basic prominence unit: schwa + full vowel, which can be constantly referred to during further pronunciation practice.

Furthermore, Poesová offers a number of teaching tips motivated by her research findings (“Under the Baton“ 36-37). They all aim at raising students’ awareness of schwa and its vital part in making stressed syllables stand out and maintain the stress-timed nature of English rhythm by reducing vowel quality in structural words.

- 1) A technique called partial transcription, which uses a normal spelling except for the schwa symbol (e.g. *Brazilian children can draw amazing parrots*; or preferably with stress marks: *Bra'ziliən 'childrən cən 'draw ə'mazing 'parrəts*), illustrates how frequently schwa occurs in English and successfully suppresses the negative influence of the English spelling. Additionally, the schwa symbol is written in a smaller font in order to demonstrate its reduced character.
- 2) The second tip involves noticing the discrepancies between words that exist in both Czech and English, for instance, *photographer* /fə'tɒgrəfə/ and its Czech counterpart *fotograf* /'fotograf/. Students are asked to come up with similar words, listen to their pronunciations and discover why they sound different. Subsequently, their attention can be drawn to the fact that English stressed syllables are commonly surrounded by reduced vowels.
- 3) The goal of the third activity, called “energy profile”, is to move a stressed syllable forward and backward within a word and examine how it affects the adjacent syllables, e.g. *umbrella* /ʌm'brɛlə/ → /,ʌmbrə'la:/ → /'ʌmbrələ/. Hence, the learners notice that English stress is not fixed to a single syllable.
- 4) In order to demonstrate prominence contrasts at the word as well as sentence level, students may establish analogies between stressed and unstressed syllables and words in the form of a matching exercise, e.g. *Brazil* /brə'zɪl → *for Jill* /fə 'dʒɪl/; *engineer* /,endʒə'niə/ → *Ben was here* /'ben wəz 'hɪə/ or homophrases (Lane, 74), e.g. *Mr Bay can cook bacon* /'beɪkən/.

- 5) The fifth task, named “Strong or Weak?”, directs students’ attention to the fact that grammatical words can have more than one pronunciation, and that weak forms contribute to creating natural rhythm. Students listen to short phrases and write S if they hear the strong form, and W if the weak form is produced.
- 6) The last recommendation encourages achieving strong prominence contrasts. Students produce the first syllable of the nonsense word *dooby* very long, high and loud, and the second extremely short, low and in a whispery voice (Hancock, M. 82).

This subsection has described the underlying tenets of the schwa-centred approach, which is promoted by Poesová’s research. This set of teaching recommendations advocates clarifying the relationships of schwa with full vowels and with higher units of the English sound system, namely word stress and rhythm, instead of teaching these properties discretely, which seems to be a common tendency in a number of current English textbooks. Students may benefit from this type of instruction at the level of perception in discriminating chunks of language, and gradually also in the area of speech production. All the presented classroom activities will serve as the major source of inspiration for designing a pronunciation programme aiming at raising students’ awareness of the neutral vowel schwa and its interconnectedness with word stress and rhythm, which will be dealt with in the practical part of the present thesis.

PRACTICAL PART

The theoretical foundation presented in the previous part is crucial for the hypothesis formulation.

The hypothesis: Regular and systematic pronunciation training and raising awareness of the interconnectedness of schwa with word stress and rhythm will improve Czech students' pronunciation of schwa in controlled speech production activities.

In order to verify or reject the above-mentioned hypothesis, the method of quantitative experiment was implemented (Gavora 153).

3. METHOD

3.1. Respondents

The experiment took place in a natural school environment, namely at Gymnázium U Libeňského zámku, Prague, which is a four-year grammar school. The author of the present thesis, who works as a resident teacher at this institution, chose one of her classes to participate in the research.

The respondent group can be characterised by the following features:

- the number of respondents – 16 (8 girls, 8 boys)
- the average age – 17 (the second year of the grammar school)
- the number of English lessons – four 45-minute lessons a week with a Czech teacher
- the textbook used – *New English File Intermediate* (2006)
- the average length of learning English – 9 years (ranging between 8 – 11)
- nobody has spent more than a month in an English-speaking country

As we can see, the respondents form a very homogenous group. Unfortunately, the control group could not be created due to organisational reasons.

3.2. Procedure

The experimental plan was designed using a pre-test and post-test (Gavora 159). The pre-test served as a tool for discovering students' level of schwa production in controlled tasks, specifically reading a list of sentences. The participants were recorded mostly during their lunchbreaks in available empty classrooms to secure quiet and undisturbed conditions. The respondents first read the sentences silently and when they were ready, the teacher asked them to read the items as naturally as possible and their speech was recorded on the Olympus digital voice recorder VN-731PC. In case of making a mistake or stumbling, the students were instructed to read the particular sentence again. The testing took approximately three minutes with each student.

The experimental programme lasted for five weeks. The independent variable was implementing regular pronunciation activities which take schwa as the starting point for teaching suprasegmental features with special focus on prominence contrasts. The author-teacher designed a battery of activities applying the schwa-centred approach and included them within her common English lessons in the selected class. The participants underwent 30 to 35-minute pronunciation practice on average every week. Apart from these activities, the classes continued as usual. The students received a handout with the activities for each week separately (all the handouts can be found in Appendix 2) and the author-teacher had prepared teacher's notes with instructions and correct answers for successful performance of the tasks (see Appendix 3). The teacher also took detailed notes of any observations regarding the teaching/learning process after each lesson. The post-test was carried out under the same conditions as the pre-test, five days after the experiment had finished.

In order to obtain the students' perspective on the usefulness and effectiveness of the implemented activities, all of them received a questionnaire six days after the end of the experiment. The questionnaire contained the following four questions:

1. Did you enjoy the pronunciation activities? Why/why not?
2. Did you find the activities useful? Why/why not?
3. What was the most difficult thing for you?

4. Can you see any improvement in your pronunciation? Where exactly?

The learners had approximately 15 minutes to answer the questions. Still, if the time given did not suffice, they could complete the question form at home and hand it in the next day. The assessment of their answers can be found in Chapter 4 and the full version of the questionnaire is available in Appendix 4. The following sections describe the form of the measuring instrument and the battery of activities used in the experiment.

3.2.1. Measuring instrument for production testing

Creating a valid and reliable measuring instrument was crucial for the research since the data gained from the initial and final testing and their subsequent comparison enabled to determine the effectiveness of teaching pronunciation to upper-secondary school students. In order to discover potential improvement in respondents' performance of the neutral vowel schwa, it was necessary to design a measuring instrument complying with the specific research goal.

The test had the form of a semi-controlled production task during which the students were asked to read a list of fourteen sentences. In these kinds of exercises students have less control over their speech production than, for instance, while repeating words since they have to rely on their own pronunciation knowledge (Poesová, *Vliv* 94). On the other hand, the students' pronunciation in this task was likely to be more accurate and less natural than in a spontaneous dialogue as they were provided with all the language and content (*ibid.*). Thus, this form of the test represented a certain compromise as far as the degree of control over pronunciation is concerned. Besides, it could be easily administered and assessed.

The test consisted of 14 sentences or two-sentence dialogues. The first two sentences served only as a preparation stage to reduce respondents' nervousness and warm up their articulators. Therefore, schwas included in these items were not taken into consideration in the subsequent analysis. The test respected the students' current level of English as the author incorporated only the words which the students had been supposed to be familiar with. The sentences were created so as to contain schwa in various positions, at both segmental and suprasegmental level, and represented by

different letters. As you can see in Table 1, the number of schwas within lexical words (word level) and in weak forms (sentence level) was balanced, as well as the amount of schwas in the initial and medial/final positions. The position of schwa at the beginning of a word was further divided into two groups – schwa in the initial position and schwa in the initial position after a consonant. The list of sentences thus included 64 schwas in total - 32 schwas in weak forms and 32 schwas in lexical words.

schwa in weak forms	schwa in the initial position	schwa in the initial position after a consonant	schwa in the medial position	schwa in the final position
to (4x)	again	Japan	August	pizza
a (6x)	opponents	tonight	opponents	sofa
and (1x)	ago	compare	famous	umbrella
have (2x)	about	constructed	museum	America
was (2x)	opinions	forget	biology	
can (2x)	o'clock	tomorrow	intelligent	
of (3x)	America	surprised	opinions	
at (1x)		survive	accident	
the (4x)		photographer	circus	
for (1x)			photographer	
your (1x)			federal	
that (1x)				
has (1x)				
do (1x)				
were (1x)				
are (1x)				
32 schwas	7 schwas	9 schwas	12 schwas	4 schwas
	16 schwas		16 schwas	
	32 schwas			
64 schwas in total				

Table 1. The list of words containing schwa according to the position in a word (in order of appearance in the test). The letters pronounced as /ə/ are highlighted.

As it has been pointed out, the schwas were also represented by different graphemes and were surrounded by various phonemes. To be more specific, 11 schwas were spelled as <a>, 11 schwas as <o>, 5 schwas as <u>, 4 schwas as <e> and 1 schwa as <ou> (excluding weak forms). It has been mentioned in the theoretical part that Czech students of English tend to produce all vowels fully according to their graphic forms due to negative transfer from the Czech language. Therefore, they may pronounce the words such as *survive* as /survaiv/ or *forget* as /fɔrget/ and on top of that they often place stress on the first syllable. However, two exceptions from the selected words are not commonly pronounced by Czech students in accordance with their spelling, namely the words *tonight* and *tomorrow*. The students may be prone to produce /u/ in the first syllable even though the vowel is spelled as <o>. It can be assumed that this common mispronunciation is caused by the strong form of the preposition *to* /tu/.

Moreover, schwas spelled as <er> in the word-final positions were not taken into account due to possible <r>-colouring (as in *never* and *photographer*). The same applies to the word *beaten* which may be pronounced with the syllabic /ŋ/ in the second syllable and the word *people* where the students may produce the syllabic /l/. Additionally, the words *believe* and *republic* can be pronounced with both /i/ and /ə/ in the first syllable which is the reason why they were excluded as well. Lastly, the word *restaurant* was not considered since /ə/ in the second syllable is often dropped. The General British pronunciation of the words used in the test was checked in the Longman Pronunciation Dictionary (Wells 2000). See Appendix 1 for the full version of the production test.

3.2.2. Battery of activities employing the schwa-centred approach

Creating a set of activities for the purpose of the present experiment had to respect the students' current level of English as well as the content of their English lessons. Many of the activities reflect vocabulary and grammar which the students have become familiar with in the textbook *New English File Intermediate* (Latham-Koenig and Oxenden, 2006). Furthermore, it was vital to balance the distribution of schwa at the suprasegmental level, particularly word stress and sentence stress, weak forms of functional words and rhythm for which vowel reduction is absolutely necessary. Most of the exercises are also accompanied by emphasis on creating prominence contrasts

between stressed and unstressed syllables at the word level, and strong and weak forms at the sentence level. Additionally, the exercises are supposed to present a balanced, user-friendly and effective battery of activities which aim at raising awareness of the target features, their perception and production, and employing traditional as well as alternative pronunciation techniques for teaching schwa.

The activities were inspired chiefly by the exercises which Poesová incorporated in her research (*Vliv* 100 and “Under the Baton” 32, 36), but also by tasks in the textbook called *Tree or Three? An Elementary Pronunciation Course* (Baker, 2006). Although this publication focuses on elementary vocabulary and grammatical features, it can serve very well for introducing new pronunciation phenomena to more advanced students since they can pay attention to pronunciation features without being distracted by unfamiliar vocabulary or grammar. Besides, the majority of the activities can be adapted to various lexical fields and grammatical aspects. Apart from that, a few exercises were borrowed from *Tips for Teaching Pronunciation: A Practical Approach* (Lane, 2010). Lane adopts the communicative approach towards pronunciation teaching, which means that most of her exercises begin with the focus on accuracy and gradually develop into freer activities where students are required to supply their own language. Last but not least, some exercises were taken over from an article by Volín (“Anglická střední středová nenapjatá samohláska”, 2002) and from the publication called *Pronunciation Practice Activities: A Resource Book for Teaching English Pronunciation* (Hewings, 2004) which provides, among others, an excellent introduction to weak forms of grammatical words.

The activities had been created before the experiment started and had been thoroughly consulted with the supervisor. As it has been mentioned, the experiment was divided into a five-week period, consisting of about 35-minute pronunciation practice on average every week. To be more specific, it was planned that one lesson out of four would involve 15-20 minutes of pronunciation teaching, the rest of the lessons 5 minutes each. Nonetheless, due to several lesson cancellations, the period of pronunciation practice during some lessons had to be extended and a few activities were even omitted. Therefore, the skipped exercises are not presented in the following

description. Still, they can be found in Appendix 2 marked by an asterisk. As far as the performed exercises are concerned, they were usually carried out at the beginning of a lesson when students' ability to concentrate is at its peak. The following section describes the activities and their incorporation in the lessons.

WEEK 1

The first lesson of the experiment started with the introduction of the /ə/ symbol. Most of the students had already been familiar with the sound that this symbol represents. In order to help the students with its pronunciation, they were asked to imagine the “Friday afternoon sound” when they relax their face, mouth and whole body and say /ə/, as if they are completely exhausted after another week of hard work (Kelly 38). The subsequent exercises were aimed primarily at raising awareness of this specific phoneme and its function in creating prominence contrasts.

1. The first exercise was aimed at exploration of the oral cavity. The students observed their lips while pronouncing schwa and thus they discovered that the lip position is neutral. Then the teacher asked them to produce pairs of schwa + different full vowels several times, e.g. /ə i: ə i:/, /ə ɔ: ə ɔ:/ etc., and to concentrate on the tongue movements from schwa to full vowels and back. It was directed at helping them realise that the tongue stays in the centre of the mouth while saying schwa.
2. In the next activity, the students perceived the explored vowel sequences in actual words. The teacher wrote the vowel pairs in exercise 1 on the blackboard. Then she read a list of words containing these vowel pairs and the students matched the words with the corresponding vowel sequences. Consequently, individual students were asked to note the answers on the blackboard in order to boost their energy, and they also tried to come up with other words for each category.

Example

/ə i:/ agree /ə ɔ:/ award

3. In this discovery activity, the teacher first revised the symbol used for marking stress /' / on an example of the word *Peru* /pə'ru:/. After that, the students read

several expressions containing the same vowel sequences as in exercise 1. The stress placement was marked by capital letters in the written form and the exact pronunciation of the lexical items was indicated using phonemic transcription, the stress being reinforced by bold fonts.

Example

/ə **i:** ə **i:**/ her TEACH**er** /hə' **ti:** tʃə/

/ə ɔ: ə ɔ: / has BOUGHT /həz ' **bɔ:** t/

The students discussed in pairs in which syllables schwa can be found. They revealed that it occurred merely in unstressed syllables. This fact was supported by an adorable image of a penguin saying “I want to be a schwa. It’s never stressed.” The teacher added that full vowels represent all the remaining vowels and they are usually present in stressed syllables, but not always. It should be pointed out that this activity is suitable only for learners who are already familiar with the notion of word stress.

4. The following activity concentrated on raising awareness of the factors which generate word stress. The teacher read the phrases in exercise 3 and the students’ task was to identify what stressed and unstressed syllables sound like. Since the learners were able to perceive only the louder vs. quieter contrast, the remaining properties, i.e. longer vs. shorter and higher vs. lower, were written on the blackboard in a jumbled order and the students matched these features with the syllable types.
5. All the previous exercises led to establishing the main prominence unit, i.e. schwa + full vowel. The teacher explained first in English, then in Czech, that the contrasts between stressed and unstressed syllables create prominence patterns, which help to maintain the natural English rhythm. The students were subsequently instructed to find several prominence contrasts in the expressions in exercise 3 and draw a square around them.
6. In this activity the students practised producing the sound properties of stressed vs. unstressed syllables on a nonsense word DOOBY. Firstly, they tried to pronounce

the first syllable very loudly, whisper the second syllable and the other way round. Secondly, they produced the first syllable longer and the second one shorter, and after that vice versa. Thirdly, they practised using the pitch by making the first syllable higher, the second lower, and then the other way round. Lastly, they said the first syllable with a full vowel and reduced the second one to schwa, and vice versa. At the end, the teacher supplied real words and the students attempted to identify the stressed syllable and the position of schwa, and pronounced the words, exaggerating the prominence contrasts.

7. The last activity of Week 1 focussed on perception practice. The teacher read a short shopping list and the students wrote the /ə/ symbol under each syllable where they could hear schwa. Consequently, the teacher revised the auditory properties of stressed and unstressed syllables. Then she read the words again and the students underlined the stressed syllables. After checking the answers, the students repeated the words after the teacher. In the final part of this task, the students discovered that schwa can be represented by diverse graphic forms.

WEEK 2

The second set of activities directed attention predominantly to the schwa and word stress perception, raising awareness of their interconnectedness and gradually switched to practising their production as well. The beginning of Week 2 started with a revision of everything that the students had learned so far, mainly the characteristics of schwa and the features of prominence contrasts.

1. In the first activity, the students only repeated the /ə/ sound after the teacher, imagining the “Friday afternoon sound” mentioned in Week 1.
2. Afterwards, the teacher read a list of words and the students raised their hand when they could hear the schwa sound. If they did, they were also asked to identify the syllable in which it occurred.
3. This task focussed again on both schwa and word stress perception. The students were presented with five word groups, each consisting of three words. The teacher

read the expressions and the students circled the words without schwa in each group. After that, the teacher produced the words once more and the students underlined the stressed syllables.

4. This exercise helped the students to drill the production of schwa and word stress, namely in the words *Peter* and *China*. The learners were asked to read the transcription record, pronouncing the visually bigger syllables more loudly than the smaller ones.

Example

a) /**pi:** pə **pi:** pə **pi:** pə | **pi:** pə **pi:** pə **pi:** pə/

b) /**ti:** tə **ti:** tə **ti:** tə | **ti:** tə **ti:** tə **ti:** tə/

c) /**pi:** tə **pi:** tə **pi:** tə | **pi:** tə **pi:** tə **pi:** tə/

5. The following task was supposed to raise students' awareness of the completely different nature of Czech and English word stress. The teacher wrote on the blackboard five English words which have very similar equivalents in Czech (e.g. *conversation* – *konverzace*) and asked the students what the equivalents are. Then the teacher read the English items and asked the students why they sound different from their Czech counterparts. Thus, the students were supposed to realise that the main discrepancy consists in word stress and vowel reduction. At the end, the participants were requested to find schwas, mark the stressed syllables and prominence contrasts, and practise producing the words.
6. In the last activity of Week 2, the teacher read eight personality adjectives (e.g. *ambitious*, *independent* etc.) and the students underlined the stressed syllables. Afterwards, they tried to find schwas and mark prominence contrasts in each word. Lastly, they were asked to read short dialogues containing the above-mentioned adjectives in pairs. The dialogues were partially transcribed, meaning that all the reduced vowels were represented with the /ə/ symbol, and the stressed syllables were written in bold in order to help the learners to pronounce the phrases correctly.

Example

What wəz **John** like? He wəz əggrɪsɪv.

What wəz **Peter** like? He wəz ambɪtɪəs ən kəmpeɪtətɪv.

WEEK 3

One of the chief aims of Week 3 was to make the students aware of the fact that stress functions not only at the word level but also at the sentence level and that prominence contrasts can be found within words and outside their boundaries as well. Furthermore, the students got introduced to the existence of strong and weak forms and the connection of the latter with schwa and lack of stress.

1. The first activity aimed at raising awareness of the fact that prominence contrasts exist both at the word and sentence level. The students were presented with a sentence written in normal spelling and in partial transcription (i.e. with the /ə/ symbols and stress marks) and they were supposed to discover what is special about the pronunciation of the phrase.

Mr Bay can cook bacon. = Mr 'Bay cən 'cook 'bacən.

The peculiar feature of this sentence is that the word *bacon* is pronounced the same as the sequence *Bay can* – both of them contain /eɪ/ in the first syllable and /ə/ in the second syllable. Therefore, both involve a prominence unit, whether it occurs within a word or in a succession of two words. Subsequently, the students matched similar phrases which are pronounced in the same way, but consist of completely different words (e.g. *soak an eye = so can I*). Eventually, the learners practised saying the phrases written in partial transcription.

2. In this exercise, the students were supposed to read a number of words and phrases written in partial transcription without stress marks (e.g. *Brəzɪl, Ben wəz here* etc.) and they were asked to underline the stressed syllable and focus on prominence

contrasts. Afterwards, they matched the phrases with the corresponding stress patterns while humming the stress (e.g. *Brazil* – oO, *Ben was here* – OoO). When the students checked their answers, they were asked to read the expressions in pairs.

3. This activity was the first one in a sequence of tasks which concentrated on raising awareness of weak forms. The teacher read a short dialogue which contained both the strong and weak form of the preposition *from*.

A: I've just got a letter.

B: Who's it from? (i)

A: It's from Jim. (ii)

The students were asked to listen carefully and discover the pronunciation difference of *from* in (i) and (ii). The first form was produced with a full vowel, whereas the second was reduced to schwa.

4. As a follow-up to the previous activity, the teacher first revised what grammatical words are. Then she explained that many grammatical words have both a weak and a strong form, e.g. *have* /hæv/ vs. /həv/, *can* /kæn/ vs. /kən/, *at* /æt/ vs. /ət/ etc. She further elaborated that weak forms are much more common for everyday speech. The vowels in weak forms are shorter and usually reduced to schwa, whereas strong forms maintain full vowels.
5. In this exercise the students received a list of twelve sentences where the weak forms of grammatical words pronounced with schwa were omitted. The students' task was to complete the gaps according to what they heard on the recording.

Example

1) He threw ____ ball ____ me.

2) You ____ come over ____ dinner soon.

After checking their answers, the students were asked to read the same sentences with weak forms written in partial transcription and with stress marks.

Example

- 1) He 'threw thə 'ball_ət 'me.
- 2) 'You məs come 'over fə 'dinner 'soon.

6. The last activity, called *Weak or strong?*, focussed mainly on perception but also production of the weak forms of *a* and *of*. The teacher introduced the activity on an example, reading the phrase with weak and strong forms:

WEAK

It's a **g**lass of **w**ater.

/ə/ /əv/

STRONG

It's a glass of water.

/æ/ /ɒv/

After that the teacher read a list of similar phrases with either weak or strong forms and the students identified them. Next, the students marked the stressed syllables and prominence contrasts. In the final phase of the activity, the teacher read all the sentences using weak pronunciation of the grammatical words and the students repeated after her.

WEEK 4

The exercises carried out during Week 4 centred predominantly around training perception and production of weak forms. Unfortunately, two originally planned activities could not be performed due to lesson cancellations, and therefore, are excluded from the description. Nonetheless, they remain to be found as a part of the students' handouts in the Appendix 2. The omitted activities are marked by an asterisk.

1. The first activity served as a revision of what the students had learned during the previous week. The teacher elicited everything that they remembered about weak forms of grammatical words and prominence contrasts in which they take part.

2. Another *Weak or strong?* activity emphasised the weak form of the verb *are*. After the identification task, the teacher distributed pictures with people performing various activities. The learners asked and answered questions in present continuous, using the pictures. The target pronunciation with the reduced auxiliary *are* had been drilled before.
3. During the last activity, the students were given a short text from a listening exercise in their textbooks (Latham-Koenig and Oxenden, *New English File Intermediate* 29). They were instructed to listen to the recording and circle all the weak forms. After listening to the narrative three times, the students checked their answers. Eventually, they received the same text in partial transcription and were asked to read it in pairs.

WEEK 5

The last set of activities put emphasis on practising perception and production of weak forms in controlled as well as more communicative exercises. Moreover, it revised the function of schwa in creating prominence contrasts which are indispensable for maintaining natural rhythm of the English language. As in Week 4, some of the exercises had to be skipped. Thus, they are included only in Appendix 2 and marked by asterisks.

1. Another *Weak or strong?* activity aimed at raising awareness of the weak and strong form of the verb *to have*.
2. The second exercise focussed on practising word stress and weak forms in the following dialogue:

A: WHERE are you GOing?

B: SHOPping. I'm LOOKing for a DICtionary.

(I NEED to BUY some GROceries.)

A: GO to BARNES and NOble.

First, the students searched for weak forms and guessed their pronunciation. Then the teacher drilled the pronunciation of the phrases chorally with the students, using DAdə language. After that, the students were instructed to practise the dialogue in pairs and replace the underlined expressions with other words from a box available on the handout. They could also come up with their own ideas. Eventually, a few pairs were chosen to perform the dialogue in front of the whole class.

3. The next activity introduced the notion of stress shift. The students were asked to mark the stressed syllables in three adjectives ending with *-ese* which were placed in three different positions.

Example

- | | | |
|-----------------|--------------------------|--------------------------|
| a) in isolation | b) with a following word | c) with a preceding word |
| Japanese | Japanese food | study Japanese |

The students were supposed to discover that if the words are produced in isolation, the stress falls on the last syllable. However, when the word is followed with another expression which is stressed on the first syllable, the stress in the first item has to be shifted to the beginning of the word to avoid the clash of two adjacent stressed syllables.

4. During another *Weak or strong?* activity, the students practised the weak form of the verb *to be* in the past tense. After drilling the target forms, the students mingled with the other classmates and asked each other questions about the date and place of their birth.
5. The last exercise implemented the partial transcription again in order to practise prominence contrasts in a coherent text. First, the students circled all the weak forms in the presented text. Finally, they read the text in pairs.

4. RESULTS

This chapter is subdivided into two parts. The first part aims at analysing the data collected from the production testing in relation to the hypothesis – verifying the effectiveness of schwa-centred pronunciation teaching. The second subsection examines the students' views on the implementation of pronunciation training in regular English classes using the questionnaires described in Chapter 4.2.

4.1. Data from production testing

A total number of sixteen students participated in the experiment. The final recording took place in a five-day interval after the pronunciation training had finished so as to prevent the immediate effect of the pronunciation training on students' speech production which could have caused a distortion of the data. The recordings were obtained without any serious complications, other than that the sound quality was occasionally decreased by the ringing of the school bell or some noise outside the classroom during the breaks.

As far as the recordings are concerned, they were analysed through careful repeated listening focussed on the items containing schwa (see section 3.2.1. for the list of the target words). The target vowel produced by a particular student was marked either as S – pronounced as schwa, as PR – partial reduction, meaning that only a certain degree of reduction was effected, or as F – realised as a full vowel. The data were noted down in Microsoft Excel spreadsheet. Nonetheless, certain items had to be excluded from the analysis due to students' mispronunciation, dysfluency or even omission. Thus, from a total number of 1024 schwa units present in the production test, only 991 schwas remained for further scrutiny, meaning that 33 items were left out. See the excluded items and the reason for their exclusion in Table 2.

The word *opponents* is mentioned twice in Table 2 in order to distinguish the specific mispronounced position since it contains two schwas and each of them was analysed separately. The positions of schwas in all the lexical words are highlighted.

Excluded lexical words (9)	Mis.	Dys.	Omi.	Excluded weak forms (24)	Mis.	Dys.	Omi.
opponents (1)	1	-	-	to (2)	-	1	1
constructed (2)	1	1	-	a (12)	-	-	12
survive (1)	-	1	-	and (1)	1	-	-
photographer (1)	1	-	-	have (2)	1	1	-
opponents (2)	2	-	-	at (1)	1	-	-
biology (1)	1	-	-	the (3)	1	1	1
federal (1)	-	1	-	were (3)	3	-	-
In total:	33						

Table 2. The number of excluded items (in brackets) and the reasons for their exclusion. Mis. = mispronunciation, Dys. = dysfluency, Omi. = omission.

It was revealed from the final set (991) that 32.69% of all the examined items were pronounced with schwa before and after the experiment, 39.76% were produced with a full vowel and only 6.05% were partially reduced. On the other hand, progress was registered in 18.67% of all the items and worsening in 2.83%. Table 3 presents the data separately for lexical words and weak forms.

WORD TYPE (the total number of items)	No improvement			Improve-ment	Worse-ning
	S - S	F - F	PR - PR		
Lexical words (503)	37.18%	35.39%	7.16%	16.70%	3.57%
Weak forms (488)	28.07%	44.26%	4.92%	20.69%	2.06%
In total (991)	32.69%	39.76%	6.05%	18.67%	2.83%

Table 3. The percentage of no improvement, improvement and worsening out of the total number of the examined items (the numbers in brackets). S – S = schwa pronounced before and after the experiment, F – F = full vowel before and after the experiment; PR – PR = partial reduction before and after the experiment.

The data were further examined from two points of view, namely the items where the pronunciation did not improve after the experiment, and the units which improved or got worse. The focus was further shifted to the position of schwa in a word and its spelling. Regarding the position of schwas, the observed items were divided into two main groups, i.e. lexical words and weak forms. The positions of schwas in lexical units were subsequently classified into four categories - the initial position (e.g. *again*), the initial position after a consonant (e.g. *Japan*), the medial position (e.g. *intelligent*) and the final position (e.g. *pizza*). As for the spelling of schwas, the production test included the following graphic forms: <u>, <a>, <o>, <e> and <ou>.

No improvements

First, let us have a closer look at the items where no pronunciation changes occurred. As for the percentage of lexical words which were correctly realised with schwa before and after the experiment, it would appear that students were most successful in the medial position category – almost 50% out of 188 items were pronounced with schwa in that particular category.

However, the proportion of schwa pronunciation to full vowel production in the initial position category and post-consonantal position category is not so clear-cut. Yet, the data in Table 4 point to the fact that there were slightly more cases of vowel reduction than full vowel pronunciation in the words with the initial position of schwa. The opposite applies to the category with the initial schwa position after a consonant.

THE SCHWA POSITION	S - S	F - F	PR – PR
Initial position of schwa (111)	41.44%	37.84%	6.31%
Initial position of schwa after a consonant (140)	31.43%	38.57%	5.71%
Medial position of schwa (188)	49.47%	25.53%	7.45%
Final position of schwa (64)	6.25%	53.13%	10.94%

Table 4. The percentage of lexical items pronounced either with schwa, full vowel or partially reduced in relation to the schwa position. The numbers in brackets represent the total numbers of items in each category out of which the percentage of the three different pronunciations was calculated. The rest of the items mostly improved, or alternatively worsened (see Table 8).

Last but not least, we can also see that more than 50% of the items in the final position category were pronounced with a full vowel. The number of cases pronounced with a schwa in this category was negligible. Additionally, the cases of partial reduction were usually minor and random apart from the group with the final schwa position.

If we take into consideration the spelling of schwa in lexical words, the largest percentage of schwa pronunciation in the pre-test and post-test occurred in the <ou> category where the only word *famous* was pronounced correctly in 93.75% cases. A significant number of accurately pronounced items was detected also in the words with schwa spelled as <e> (in 56.45%) and <u> (in 51.90%). On the contrary, the items with schwa spelled as <o> and <a> were prevalently pronounced with a full vowel, respectively in 52.63% and 37.71% of cases. See Table 5 for detailed information.

SPELLED AS:	S - S	F - F	PR - PR
<u> (79)	51.90%	12.66%	10.13%
<a> (175)	30.86%	37.71%	8.57%
<o> (171)	24.56%	52.63%	4.68%
<e> (62)	56.45%	19.36%	8.06%
<ou> (16)	93.75%	0%	0%

Table 5. The percentage of lexical items pronounced either with schwa, full vowel or partially reduced in relation to the spelling of schwa. The numbers in brackets represent the total numbers of items in each category out of which the percentage of the three different pronunciations was calculated. The rest of the items mostly improved, or alternatively worsened (see Table 9).

Concerning individual lexical items, the words which were correctly pronounced in the majority of cases are *famous* (in almost 94% of cases), *survive* (in 80%), *federal* and *opinions* (in 75%), *federal* (in 73%), *ago*, *o'clock*, *intelligent* and *circus* (in almost 69%), *about* and *surprised* (in 62.5%). Thus, we can see that most of the above-mentioned items fall under the medial position category.

Contrarily, a full vowel was pronounced especially in the words *opponents* (a full vowel produced in 100% of cases), *photographer* (in 87.5% of cases), *photographer* and *biology* (in nearly 87%), *opinions* and *pizza* (in 81%), *constructed* (in 71%), *compare* (in nearly 69%) and *America* (in 62.5%). It should be pointed out that all the aforementioned items have very similar Czech equivalents which may have had an impact on the full production of vowels. Despite that, the production test included other words with Czech counterparts which were pronounced correctly before and after the experiment, e.g. *intelligent*, *federal* and *circus*. Therefore, no reliable conclusions can be drawn from that.

The situation in the pronunciation of weak forms was considerably different. The number of cases with accurate pronunciation before and after the experiment was extremely low, except for the articles *a* and *the* which were mostly pronounced correctly. Therefore, it would appear that weak pronunciation of the articles is completely natural for students; however, it is quite clear that they had not been instructed on the weak forms of the other grammatical words before.

From the point of view of full vowel realisation in the pre-test and post-test, the least successful items were *your* (full vowel production in almost 94% of cases), *that* (in 87.50%), *at* (in 80%), *are* and *can* (in 75%), *and* (in 73.33%), *to* (in 70.97%), *has*, *do* and *for* (in 62.5%). See Table 6 for details.

WEAK FORMS	S - S	F - F	PR - PR
have (30)	3.33%	40%	0%
was (32)	6.25%	21.86%	9.39%
were (13)	7.69%	46.15%	0%
has (16)	0%	62.50%	0%
of (48)	2.08%	54.17%	8.34%
do (16)	0%	62.5%	6.25%
for (16)	6.25%	62.5%	0%
and (15)	0%	73.33%	0%
can (32)	0%	75%	6.25%
are (16)	6.25%	75%	0%
to (62)	6.45%	70.97%	4.84%
at (15)	0%	80%	13.33%
that (16)	0%	87.5%	6.25%
your (16)	0%	93.75%	0%
a (84)	79.76%	3.57%	9.52%
the (61)	96.72%	0%	0%

Table 6. The percentage of weak forms pronounced either with schwa, full vowel or partially reduced. The numbers in brackets represent the total numbers of items for each grammatical word out of which the percentage of the three different pronunciations was calculated. The rest of the items improved or worsened (see Table 10).

Additionally, the data were observed for any differences between the girls' and boys' speech production, but the results were very balanced.

Improvements and worsenings

The data were further examined for any improvement (alternatively, for worsening) and its degree, namely the shift from full vowel pronunciation to partial reduction, from partial reduction to complete reduction or from full pronunciation to complete reduction. On the whole, the students' pronunciation improved in 185 cases out of 991; in other words, they got better in 18.67% cases. We could see in Table 3 that their pronunciation had been enhanced slightly more in weak forms (by 20.69%) than in lexical words (16.70%).

Considering the degree of reduction, 47.03% of the improved items were from full vowel to partially reduced pronunciation, 24.32% from partial reduction to schwa and 28.65% from full vowel to schwa. If we focus on lexical words and weak forms separately, the results vary quite substantially. With regard to the lexical items, the results for the three degrees of reduction were fairly balanced. Nevertheless, more than half of the weak forms (57.42%) shifted from full vowel pronunciation to a partially reduced realisation. See Table 7 for details.

WORD TYPE (the number of improved items)	IMPROVEMENTS		
	F → PR	PR → S	F → S
Lexical words (84)	34.52%	35.71%	29.77%
Weak forms (101)	57.42%	14.85%	27.73%
In total (185)	47.03%	24.32%	28.65%

Table 7. The percentage of improvements considering the degree of reduction in lexical words and weak forms. **F → PR** – shift from full vowel to partial reduction; **PR → S** – from partial reduction to schwa; **F → S** – from full vowel to schwa. The numbers in brackets represent the total number of improvements for each group out of which the data for the three degrees of improvement were calculated.

With regard to the position of schwa within lexical words, the largest pronunciation progress was detected in the final schwa position (by 23.44%) and in the initial position after a consonant (by 20%). See Table 8 for more information.

As far as the initial position is concerned, the most cases of improvement occurred in the words *America* (25%) and *opinions* (19%). In the second category, i.e. the initial position of schwa after a consonant, the students improved the most in the words *tonight* (by 38%) and *Japan* (by 32%). Furthermore, almost 38% of the students enhanced their vowel pronunciation in the word *August* and 32% in the words *museum* and *intelligent*. Lastly, the most significant improvement, not only in the final category, occurred in the word *umbrella* (by 44%) and 32% of the students pronounced the word *America* with a larger degree of reduction as well. On the contrary, the improvement in the other words of the final group, i.e. *pizza* and *sofa*, was negligible.

THE SCHWA POSITION	Improvement	Worsening
Initial position of schwa (111)	10.81%	3.60%
Initial position of schwa after a consonant (140)	20%	4.29%
Medial position of schwa (188)	15.43%	2.12%
Final position of schwa (64)	23.44%	6.25%

Table 8. The percentage of improvements and worsenings in the lexical words according to the schwa position. The numbers in brackets represent the total numbers of items in each category out of which the percentage of improvement/worsening was calculated. The rest of the items were analysed in Table 4.

With regard to the spelling of schwa in lexical words, the largest percentage of improvement was registered in the cases where schwa was spelled as <u> (22.78%) and also as <a> (17.71%). As for the graphemes <o> and <e>, the full vowel was reduced in almost 15% cases. Additionally, the spelling <ou> was part of one lexical item only and was pronounced correctly before and after the experiment by the majority of students. Therefore, room for progress was fairly limited. See Table 9 for detailed information.

SCHWA SPELLED AS:	Improvement	Worsening
<u> (79)	22.78%	2.53%
<a> (175)	17.71%	5.15%
<o> (171)	14.62%	3.51%
<e> (62)	14.52%	1.61%
<ou> (16)	6.30%	0%

Table 9. The percentage of improvements and worsening in lexical words according to the spelling of schwa. The numbers in brackets represent the total numbers of items in each category out of which the percentage of improvement/worsening was calculated. The rest of the items were analysed in Table 5.

Looking at specific words where schwa was spelled as <u>, the highest percentage of improvements involved the words *August* (by almost 38%) and *museum* (by almost 32%). In the second category with <a> spelling, the largest progress was detected in the word *umbrella* (by almost 44%), and also in *Japan* and *America* in the final position (by nearly 32%). The most improved word with schwa spelled as <o> was *tonight* (by almost 38%) and the most enhanced pronunciation with <e> as the graphic form of schwa occurred in the word *intelligent* (by nearly 32%). The majority of other lexical items also got better as for pronunciation; nonetheless, usually by less than 20%.

As it has been mentioned, the other major examined group of items, i.e. weak forms, revealed slightly more prominent progress (by 20.69%) than lexical words (16.70%). The largest percentage of improvements appeared in the auxiliaries *have* (by almost 57%), *was* (by approx. 56%), *were* (by 38.5%), *has* (by 37.5%) and the preposition *of* (by 33%). See Table 10 for more information.

WEAK FORMS	Improvement	Worsening
have (30)	56,67%	0%
was (32)	56,25%	6.25%
were (13)	38,46%	7.70%
has (16)	37,50%	0%
of (48)	33,33%	2.08%
do (16)	25%	6.25%
for (16)	25%	6.25%
and (15)	20,00%	6.67%
can (32)	18,75%	0%
are (16)	18,75%	0%
to (62)	16,13%	1.61%
at (15)	6,67%	0%
that (16)	6,25%	0%
your (16)	6,25%	0%
a (84)	4,76%	2.39%
the (61)	3,28%	0%

Table 10. The percentage of improvements and worsenings in weak forms. The numbers in brackets represent the total numbers of items for each word out of which the percentage of improvement/worsening was calculated. The rest of the items were analysed in Table 6.

It seems quite logical that the least significant improvement occurred in the articles *a* and *the* since most of the students had already pronounced them correctly before the experiment.

Moreover, the data were scrutinised for any differences between boys' and girls' progress. The boys, who improved by approximately 9.7%, appeared slightly more successful than the girls, who pronounced almost 7% of the items better. The results for weak forms in the two groups were almost equal. On the whole, the boys outperformed the girls merely by 1.11%, therefore no conclusions can be drawn. See Table 11 for details.

WORD TYPE	Boys	Girls
Lexical words (503)	9.74%	6.96%
Weak forms (488)	10.04%	10.65%
In total (991)	9.89%	8.78%

Table 11. The percentage of improvements in boys' and girls' performance out of the total 16.7%.

However, differences between individual students' performances were apparent since the improvements ranged between 7.81% and 30.16% of items per student. The average improvement score was 18.67% and 12 students' improvement (out of 16) ranged between 13% and 23%. The lowest improvement scores were 7.81% and 8.20%, the highest improvement scores were 27.87% and 30.16%. It could also be observed in the majority of cases that the higher the number of improvements in individual students' production, the higher the degree of vowel reduction. In other words, the students with the largest percentage of improvements progressed from full vowel pronunciation to schwa in more cases than the other students.

Apart from the improvements, it should also be mentioned that a minor number of pronunciation worsenings occurred in students' sound production. To be more specific, the schwa pronunciation deteriorated in approximately 2.8% of cases, namely by 1.8% in lexical words and by 1% in weak forms. In the majority of cases, the pronunciation shifted from partial reduction to full vowel production. Changes from schwa to partial reduction or from schwa to full vowel were rare. To sum up, the number of worsenings would appear negligible.

4.1.1. Discussion

The analysis of the data revealed quite interesting results. The students' progress was more visible in the pronunciation of weak forms than lexical items despite the fact that vowel reduction in function words is difficult to achieve, especially for those whose native language does not have vowel reduction (Lane 73). The reason for this surprising outcome could be the fact that the experiment involved a slightly higher number of activities aimed at practising weak forms than vowel reduction in lexical words. Furthermore, the experiment proceeded from the focus on word stress to rhythm and weak forms of grammatical words. Thus, the weak forms were the last focal point in the

course of the experiment, which may have caused the students to concentrate on their pronunciation to a larger extent during the post-test reading. Another factor for the above-mentioned result might be the number of correctly pronounced items in the pre-test which was higher in the lexical words. This fact could imply that the students actually had a greater space to improve in the weak form section.

Considering the degree of improvement, i.e. either from full vowel to partial reduction, from partial reduction to schwa or from full vowel to schwa, the results were fairly balanced in all three categories as far as lexical words are concerned. On the contrary, the vast majority of learners progressed from full vowel pronunciation to partial reduction in weak forms, which may point to the fact that the students had not been familiar with this aspect before; thus, it would appear that their pronunciation benefitted from the focussed training. This could also be proved by considerable improvement in words such as *have*, *was*, *were*, *has* and *of* which were the focal point of particular exercises unlike other grammatical words included in the production test.

Regarding the different positions of schwa within lexical words, the results revealed that the students enhanced their production of schwa in the final position and in the post-consonantal initial position more than in the medial and initial position. The words with schwa in the final position were also mostly pronounced with a full vowel before and after the experiment, which means that the learners had more space for improvement than in the category with schwa in the medial position where a large number of items was pronounced with schwa in the pre-test and post-test. However, the tables in the previous section show average amounts of improvements for each group of words and the number of improvements differed greatly among individual items and students. As a result, it is rather difficult to draw any conclusions about the impact of a position of schwa on its production.

As for the spelling criteria, most cases of improvement occurred in the words with schwa spelled as <u>. This is also a category where a significant number of items were pronounced with schwa in the pre-test and post-test. Hence, it seems that it is less demanding for the learners to reduce full vowels to schwa when represented by the grapheme <u>. Still, it should be mentioned that the results varied among specific items

and students; and thus, no significant influence of a particular grapheme on vowel reduction can be proved.

Apart from a supposed improvement thanks to the pronunciation training, we should also take into consideration the learning effect in the data interpretation. It is an assumption that the interaction of the learning process and students' psychological development exerts an influence and gradually leads to the improvement of students' knowledge and skills, even though very often to a minor degree (Poesová, *Vliv* 110). This kind of effect could not be neutralised since the experiment took place during normal English lessons.

Finally, it should be remarked that students who possess a less developed musical ear may not have improved as much as learners endowed with increased sound sensitivity. Nevertheless, teaching pronunciation can actually help the students lacking a language talent to understand certain principles connected to the perception and production of specific pronunciation features (Poesová, *Vliv* 123). Students' performance could have also been influenced by affective factors, such as boredom, lack of interest, attitude towards learning English and its pronunciation, lack of self-confidence etc.

4.2. Questionnaires

The supplementary source of information about the effectiveness of the schwa-centred approach was provided by short questionnaires. As it has been mentioned in section 3.2., each learner received a questionnaire with four questions after the final testing. This sub-chapter summarises their answers. See Appendix 4 for the full version of the questionnaire.

Did you enjoy the pronunciation activities? Why/why not? What did you enjoy the most?

Most of the students agreed that the studied material was something completely new and fresh for them. They found the activities very interesting, fun and some of them expressed an interest in continuing with the pronunciation training. Although one of the students claimed that the activities had taken a long time and he had sometimes got

bored, he admitted that pronunciation is a part of learning English and we should study it as well if we want to see some progress.

As for the specific aspects that the students enjoyed the most, their answers were quite diverse. They appreciated, for example, the picture of a penguin saying “I want to be a schwa. It’s never stressed.”, practising stressed and unstressed syllables, weak forms, pair work activities etc.

Did you find the activities useful? Why/why not?

All the students unanimously agreed that the training was useful. They displayed understanding about the significance of practising schwa-centred aspects of pronunciation to sound “more English”. Despite that, certain students expressed a degree of concern about the inability to use the newly learned features in spontaneous speech during which they focus more on meaning rather than form. Still, these students appreciated at least getting introduced to the subject matter.

What was the most difficult thing for you?

A large number of students revealed that the beginnings of the experiment were rather difficult for them and they felt a bit confused by the amount of new information. Luckily, during the third week, when the weak forms were presented, everything clicked into place and they finally comprehended the intricate nature of schwa. The most demanding aspect for some students was to pronounce schwa in the correct position. The majority complained about the difficulty of concentrating on accurate pronunciation during free speech production.

Can you see any improvement in your pronunciation? Where exactly?

Only a few learners reported that they could not see much improvement in their sound production, chiefly due to the enormous effort that they had to make to focus on several things at the same time. Nevertheless, most of the students wrote positive comments about their progress. Certain learners claimed that they could perceive the improvement in the area of word stress recognition and most of them especially in weak form production. Other students expressed their belief that the raised awareness of schwa

would further help them to concentrate on the target aspect during listening and speaking activities. Moreover, as an amusing example, one student conveyed that he sounds more English now and his British accent is “sexier”.

In general, we could see that the vast majority of the students enjoyed the training for its novelty and originality; and they understood the importance of schwa-centred aspects for more native-like speech production. Besides, the learners seem to have observed development in the right direction regarding their pronunciation, especially in weak forms which correlates with the positive results of the production testing.

From the teacher’s point of view, the vast majority of students seemed truly interested in the experiment and keen on working on their pronunciation. The teaching pace had to be slower than expected during the first two weeks as certain features took the students a longer time to grasp. Nonetheless, a crucial point came during the third week when all the aspects of the schwa-centred approach were brought together and the students finally saw it through. Except for one student who seemed rather bored and absent-minded throughout the whole experiment, all the students cooperated very well and no serious difficulties occurred.

CONCLUSION

The aim of the thesis was to implement a so-called schwa-centred approach towards pronunciation teaching into English lessons and to verify its effectiveness. With regard to the initial hypothesis, it could be said that regular and systematic pronunciation training and raising awareness of the interconnectedness of schwa with word stress and rhythm improved Czech students' pronunciation of schwa in controlled production activities. Although the progress was gradual and it varied among the individual learners, we could observe development in the right direction. Therefore, the hypothesis could not be rejected.

Major improvement occurred in the pronunciation of specific weak forms which were concentrated on during particular exercises. Hence, even though vowel reduction in grammatical words is typically considered more demanding to acquire than in lexical words, we could see that special focus can lead to improvement.

As for the students' view on this kind of approach, the vast majority agreed on its usefulness and appreciated the novelty of the employed activities. Although they found the subject matter rather difficult to comprehend at the beginning, they mostly confirmed the presence of some positive changes in their speech production and realised the value of pronunciation teaching as such. Nevertheless, the students revealed a certain degree of concern about not being able to use the newly gained knowledge in spontaneous speech during which their attention is directed primarily at the meaning rather than the form of an utterance.

Naturally, the results are not unequivocal due to a few limitations of the research. Since the measuring instrument of this research involved only reading sentences, which is a semi-controlled speaking activity, the presence of any improvement in the free speech could not be proved. Moreover, the time designated for the performance of the experiment was not sufficient for more striking changes in students' performance. Additionally, the presence of a control group could have yielded more convincing results. Still, it should be emphasised that the explicit pronunciation training launched encouraging changes in the students' speech production.

The chief output of this study is a set of pronunciation activities designed in compliance with the schwa-centred approach with the focus on perception, production and raising awareness of the target features. This battery of exercises can serve as a didactic tool for English teachers and as an inspiration for extending the existing collection of activities in order to help learners enhance their pronunciation.

FURTHER RESEARCH SUGGESTIONS

The present study did not reveal a very notable improvement in students' sound production, possibly due to the time limitations of the experiment. Thus, further research could aim at longitudinal studies examining the effect of a more intensive pronunciation training employing schwa-centred activities to verify more significant changes in Czech students' pronunciation, ideally in spontaneous speech.

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APPENDICES

Appendix 1	Production test
Appendix 2	The battery of activities
Appendix 3	Teacher's notes to the activities
Appendix 4	Students' questionnaire

APPENDIX 1: PRODUCTION TEST

You have got a few minutes to read the following sentences silently. When you're ready, read the sentences aloud as naturally as you can. If you make a mistake, don't worry, you can read the sentence again.

1. I usually go to the gym twice a week.
2. Shakespeare was very popular with Queen Elizabeth I.
3. They are going to Japan again in August.
– Really? I have never been there.
4. Shall we go to the lovely pizza restaurant tonight?
– Well, we were planning to go there on Friday.
5. Chelsea have beaten their opponents 3 to 2.
6. Compare this sofa with that one. Which one do you like more?
7. This famous museum was constructed a long time ago.
8. Can I borrow your umbrella?
9. Don't forget about the biology test tomorrow.
10. I was surprised by his intelligent opinions.
11. A lot of people didn't survive the accident in the circus.
12. We can meet at 5 o'clock for a cup of coffee and a cake.
13. I believe that this photographer has done a great job.
14. The United States of America is a federal republic.

APPENDIX 2: THE BATTERY OF ACTIVITIES

WEEK 1

SCHWA /ə/ “the Friday afternoon sound” (Kelly 38)

- I.** a) What do the lips do when we say /ə/?

b) Say the /ə i: ə i:/ pair 4 times. Where is the tongue moving? Is it going up or down, to the front or to the back? Do the same with the other pairs.

/ə i: ə i:/ /ə ɔ: ə ɔ:/ /ə u: ə u:/ /ɑ: ə ɑ: ə/ /ə æ ə æ/ /e ə e ə/

- c) What does the tongue do when we say /ə/?

- II.** a) Listen to the teacher saying several words. Which vowels do the words have? Do they have the same vowel pairs like the pairs below? Write them under the correct pair.

/ə i: ə i:/ /ə ɔ: ə ɔ:/ /ə u: ə u:/ /ɑ: ə ɑ: ə/ /ə æ ə æ/ /e ə e ə/

Peru

- b) Can you think of other words with the same vowel pairs?

- III.** Read the following words individually. In which syllables can we find schwa? Discuss with your partner.

/ə i: ə i:/

her TEACHER /hə'ti:tʃə/

aGREE /ə'gri:/

/ə u: ə u:/

baLOON /bə'lun/

at NOON /ət 'nu:n/

/ə ɔ: ə ɔ:/

aWARD /ə'wɔ:d/

has BOUGHT /həs 'bɔ:t/

/ɑ: ə ɑ: ə/

baNAna /bə'nɑ:nə/

her CAR /hə 'kɑ:/

/ə æ ə æ/

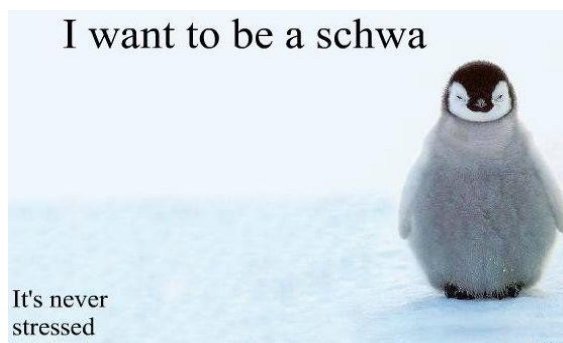
aTTACK /ə'tæk/

can CRASH /kən 'kræʃ/

/e ə e ə/

coLLECT /kə'lekt/

BETTer /'betə/



- IV. Listen to the teacher saying the words in exercise III. What do the unstressed and stressed syllables sound like?

unstressed: _____

STRESSED: _____

- V. a) The contrasts between stressed and unstressed syllables create prominence patterns. They help to keep the natural rhythm of English. The basic prominence unit is schwa + full vowel

b) Find prominence units/contrasts in the words in exercise III.

- VI. Practise saying the nonsense word DOOBY in different ways. (Hancock, M. 82)

a) LOUDNESS – say the 1st syllable loudly and whisper the 2nd – DOOby
- now the other way round – dooBY

b) LENGTH – say the 1st syllable longer and the 2nd shorter – DOOOOOOby
- now the other way round – doBBBBBBBB

c) PITCH – make the 1st syllable higher and the 2nd lower, then the other way round

d) QUALITY – say the 1st syllable with the full vowel and reduce the second to /ə/
DOObə
- now the other way round – dəBYY

e) ALTOGETHER – let's use a real word, e.g. *agree*. Which syllable will be quieter, shorter, lower and reduced? Pronounce it.

VII. a) Look at the shopping list and listen to the words. Write the symbol /ə/ under the syllables where schwa is pronounced. (Baker 7)

Example: *tomatoes*

/ə/

Shopping list:

<i>pepper</i>	<i>potatoes</i>	<i>pasta</i>	<i>yoghurt</i>
<i>bananas</i>	<i>lemon</i>	<i>carrots</i>	<i>newspaper</i>

b) Listen to the words again and underline the stressed syllable in each word.

c) Listen for the last time and repeat. Make the stressed syllables louder, higher and longer, the unstressed syllables quieter, lower and shorter.

d) Which letters represent /ə/? _____

WEEK 2

I. Listen to /ə/ and repeat. (Imagine the “Friday afternoon” sound when you relax your whole body.)

II. Listen to the following words. Raise your hand if you hear /ə/.

seafood, lettuce, salmon, peaches, pizza, octopus, soup, spicy, starter, vegetables, spinach, salad, takeaway, fast food, McDonalds

III. a) Listen to each group of words. Circle the word without /ə/.

Group 1	Group 2	Group 3	Group 4	Group 5
mother	coach	fashionable	stadium	decide
window	referee	hungry	career	discover
question	spectator	injured	sports hall	compete

b) Listen again and underline the stressed syllable in each word.

IV. Pronounce the bigger syllables more loudly than the smaller ones. (Volín, “Anglická” 10)

1. a) /**pi:** pə **pi:** pə **pi:** pə | **pi:** pə **pi:** pə **pi:** pə/
 b) /**ti:** tə **ti:** tə **ti:** tə | **ti:** tə **ti:** tə **ti:** tə/
 c) /**pi:** tə **pi:** tə **pi:** tə | **pi:** tə **pi:** tə **pi:** tə/

2. a) /**tʃai** tʃə **tʃai** tʃə **tʃai** tʃə | **tʃai** tʃə **tʃai** tʃə **tʃai** tʃə/
 b) /**nai** nə **nai** nə **nai** nə | **nai** nə **nai** nə **nai** nə/
 c) /**tʃai** nə **tʃai** nə **tʃai** nə | **tʃai** nə **tʃai** nə **tʃai** nə/

V. a) Look at these words. How do we say them in Czech?

geography *conversation* *political* *academy* *internet*

b) Listen to the pronunciation of the words. Why do they sound different?

c) Practise saying the words in pairs.

VI. a) Underline the stressed syllable in the following words.

ambitious disorganised competitive aggressive

independent generous sociable manipulative

b) Do the stressed syllables in exercise a) have schwa in their neighbourhood? Mark prominence contrasts in each word.

.....

c) What were the following people like when they were younger? Read the dialogues in pairs. Then swap. Pronounce the stressed syllables louder, higher and longer; the syllables with schwa shortly and weakly.

What wəz **John** like?

He wəz ə**g**gressive.

What wəz **Peter** like?

He wəz əmbi**t**iəs ən cəm**p**etətive.

What wəz **Mary** like?

She wəz ɡenərəs ən so**c**iəble.

What wəz **Paul** like?

He wəz ɪndep**e**ndənt ən dis**o**rgənised.

What wəz **Susan** like?

She wəz mən**i**pjələtive.

WEEK 3

I. a) Read the sentence below. What is special about it?

Mr Bay can cook bacon. = Mr 'Bay cən 'cook 'bacən. (Lane 74)

b) Match the phrases with the same pronunciation.

- | | |
|-------------------------|---------------------------|
| 1) a chicken egg | a. so can I |
| 2) soak an eye | b. Bea can light |
| 3) Helen Heven | c. a chick and egg |
| 4) beacon light | d. hell and heaven |

c) Read the phrases with the same pronunciation. Pay attention to /ə/ and stressed syllables.

- | | |
|---|---|
| ə chickən egg = ə chick ən egg | Helən Hevən = hell ən heavən |
| soak ən eye = so cən I | beacən light = Bea cən light |

II. a) Read the following words/phrases aloud and focus on prominence contrasts. Mark the stressed syllables and match the expressions with the stress patterns (hum them).

- | | | | |
|-------------|-----------------------|------------------|------------------|
| engəneer | fə Jill | Ben wəs here. | ə piece əf bread |
| Brəzil | latə | bread ənd butter | Chinə |
| compətition | They shouldn't speak. | | |

oO	Oo	OoO	oOoO	OoOo

b) Listen and check your answers. Then practise reading the words/phrases.

III. Look at the following dialogue. What is the pronunciation difference between *from* in (i) and (ii)? (Hewings 94-95)

A: I've just got a letter.

B: Who's it from? (i)

A: It's from Jim. (ii)

IV. Many grammatical words (e.g. *have, at, can*) have both a weak and a strong form.

WEAK FORMS

- usually reduced to schwa
- shorter
- more common in everyday speech
- e.g. /frəm/

STRONG FORMS

- full vowel
- longer
- /frɒm/

V. a) Listen to the sentences and complete the gaps with the words you hear. (Hewings 94-95)

- 1) He threw _____ ball _____ me.
- 2) You _____ come over _____ dinner soon.
- 3) Bill _____ Mark _____ left.
- 4) _____ you got more _____ Tom?
- 5) I _____ _____ home _____ five o'clock.
- 6) We _____ talk about it _____ lunch.
- 7) Ask _____ _____ come _____ _____ party.
- 8) _____ you tell _____ now?
- 9) We _____ going _____ _____ park.
- 10) When _____ you get _____ results _____ _____ tests?
- 11) _____ _____ be _____ more in _____ box.
- 12) When _____ you taking him _____ see _____?

b) Check your answers with the key below.

1) the, at; **2)** must, for; **3)** and, have; **4)** have, than; **5)** was, at, from; **6)** could, at; **7)** them, to, to, the; **8)** can, us; **9)** were, to, the; **10)** do, the, of, your; **11)** there, should, some, the; **12)** are, to, her.

c) Listen, read and repeat. Make sure to say schwa in the weak forms and some unstressed syllables. Pay attention to the stress, too.

- 1) He 'threw thə 'ball_ət 'me.
- 2) 'You məs come 'over fə 'dinner 'soon.
- 3) 'Bill_ən 'Mark_əv 'left.
- 4) Həv you got 'more thən 'Tom?
- 5) 'I wəz_ət 'home frəm 'five ə'clock.
- 6) We cəd 'talk əbout it_ət 'lunch.
- 7) 'Ask thəm tə 'come tə thə 'party.
- 8) Cən you 'tell_əs 'now?
- 9) We wə 'going tə thə 'park.
- 10) 'When də you 'get thə re'sults_əv yə 'tests?
- 11) Thə shəd be səm 'more in thə 'box.
- 12) 'When_ə you 'taking him tə 'see_ə?

Why do you think weak forms exist? _____

VI. Weak or strong?

- a) Listen to the difference between the weak and strong forms in the following sentences. (Poesová, *Vliv* 198)

WEAK

It's a **g**lass of **w**ater.

• • ● • ● •

/ə/ /əv/

STRONG

It's a glass of water.

/e/ /ov/

It's a **c**up of **c**offee.

/ə/ /əv/

It's a cup of coffee.

/e/ /ov/

- b) Listen to the following sentences. If you can hear WEAK forms, write **W**. If you can hear STRONG forms, write **S**.

1) It's a glass of water.

2) It's a cup of coffee.

3) It's a bowl of fruit.

4) It's a vase of flowers.

5) It's a newspaper.

6) It's a piece of chocolate.

- c) Listen to the WEAK forms and repeat. Mark the stressed syllables and prominence contrasts.

WEEK 4

- I.** What do you remember about weak forms of grammatical words? Identify the prominence contrasts in the following expressions.

fresh supplies This is for John.

- II.** a) Listen to the following phrases. Write S if you hear the strong form and W if the weak form. (Poesová, *Vliv* 199-200)

Example: WEAK

We are listening to jazz.

/ə/

They are playing basketball.

STRONG

We are listening to jazz.

/ɑː/

They are playing basketball.

1) They are studying French.

2) What are you doing?

3) Don't worry. You are doing fine.

4) My parents are moving next week.

5) The prices are going down.

6) We are flying to China.

b) Work in pairs. Point to two people in the picture and ask your partner "What are they doing?". Your partner will answer "They are ..." according to the picture. Then swap.

e.g. 'What ə they 'doing?

- 'They ə 'swimming.

- III.** a) Listen to the text and circle all the weak forms of grammatical words with schwa. (Latham-Koenig and Oxenden, *New English File* 29)

I set off at six. It was still dark when I put my suitcase in the car and drove off. I had a good journey through London because it was Saturday so there was no rush hour traffic. Soon I was on the M20 motorway heading towards Folkestone on the south coast. I stopped at a service station for a cup of coffee and a sandwich.

b) Check your answers. Practise reading the text in pairs.

I 'set off ət 'six. It wəs 'still 'dark when I 'put my 'suitcase in thə 'car ənd drovə 'off. I həd ə 'good 'journey through 'Londən be'cause it wəs 'Sətəday so thə wəs nɔ 'rush hour 'traffik. 'Soon I wəs on the 'M20 'mɔtəweɪ 'heading tə'wards 'Folkestən on thə 'south 'coast. I 'stopped ət ə 'service 'stəʃən fər ə 'cup əf 'kɒfi ənd ə 'sændwɪtʃ.

IV. a) Read aloud these words for some foods that often go together. Repeat the phrases. Pronounce *and* as /ən/. Join it to the first word. Stress the syllables in bold. * (Lane 79-80)

1. **turkey** ənd **stuffing**

5. **salt** ənd **pepper**

2. **cookies** ənd **milk**

6. **cake** ənd **ice cream**

3. **bacon** ənd **eggs**

7. **chips** ənd **dip**

4. **bread** ənd **water**

8. **fish** ənd **chips**

b) Choose three phrases from exercise a) and write them on the lines.

c) Work with a partner. Read your phrases to her/him. Your partner will write what you say. Then listen to your partner's phrases. Write them on the lines.

Partner's phrases:

d) Work in pairs. The foods in exercise a) are eaten by different groups of people or in different situations. Complete the sentences with the foods in exercise a) and read them aloud.

1. For breakfast, it's bacon and eggs.
2. In prison in the old days, it was _____.
3. For a children's snack, it's _____.
4. For dessert, it's _____.
5. At a party, it's _____.
6. For Thanksgiving, it's _____.
7. These spices make food taste better: _____.
8. In England, it's _____.

e) Write down other foods that go together. Tell your partner what you often eat.

Focus on the weak form. e.g. I eat a lot of fruit and vegetables.

fruit_ən vegetables

V. Playing with word stress. *

Which syllable is stressed? Read aloud all the possibilities and decide.

DISCOVERY

MASCULINE

DISCOVERY

MASCULINE

DISCOVERY

MASCULINE

DISCOVERYR

WEEK 5

I. Weak or strong?

a) Listen to the following phrases. Write S if you hear the strong form and W if the weak form of the verb *have*.

WEAK

She has been reading.

/ə/

• • • ● •

STRONG

She has been reading.

/æ/

● • • ● •

1. He has gone home.
2. What have you been playing?
3. They have been working in the garden.

4. It has been raining all day.
5. We have just started.
6. Has he finished yet?

b) Work with your partner. Ask him/her the following questions. Your partner will think of an answer. Swap after each line.

You look TIred. WHAT_əv you been DOing? – I've been...

You ə DIRty. WHAT_əv you been DOing? – I've been...

Hər EYES ə RED. WHAT_əz she been DOing? – He's been...

They look HAPpy. WHAT_əv they been DOing? – They've been

He looks SCARED. WHAT_əz HAppened? –

She looks ANgry. WHAT_əz HAppened? – ...

II. a) Look at the dialogue. Are there any weak forms? How should they be pronounced? (Lane 62-63)

A: WHERE are you GOing?

DA də də DA da

B: SHOpping. I'm LOOKing for a DICtionary.

(I NEED to BUY some GROceries.)

A: GO to BARNES and NOble.

b) Work with a partner. Create your own dialogues by replacing the underlined words in exercise a) with the words below. You can buy things in shops which are not on the list. Don't forget to stress the capitalised syllables and reduce the weak forms.

I'm looking ...	I NEED tə BUY	GO
fər_ʊ (for a) SWEATER	səm FOOD	tu IKEa
fər_ʊ DICTIONary	səm FURNiture	tə MARKS ən SPENcer
fər_ʊ compUTer	səm GROceries	tə SEphora
fə SHOES	tə BAʔa
fər_ʊ TABle		tu H&M (HənM)
fə JEANS		tə EUronics
fər_ʊ JAcKet		tə TESco
.....	

III. Listen to the words. Mark the stressed syllable

- | | | |
|-----------------|--------------------------|--------------------------|
| a) in isolation | b) with a following word | c) with a preceding word |
| Japanese | Japanese food | study Japanese |
| Chinese | Chinese medicine | speak Chinese |
| Portuguese | Portuguese footballer | learn Portuguese |

IV. Weak or strong?

a) Listen to the following phrases. Write S if you hear the strong form and W if the weak form of the verb *to be* in the past simple. (Poesová, *Vliv* 202)

WEAK

STRONG

When were you **born**?

When were you born?

/wə/

/wɜː/

● ● ● ●

● ● ● ●

Where were you **born**?

Where were you born?

/wə/

/wɜː/

b) Ask 6 classmates about the place and date of their birth. Don't write anything.

Example 1: 'When wə you 'born? - I wəz 'born in '1999.

Example 2: 'Where wə you 'born? - I wəz 'born in 'Prague.

- V. Read the text to your partner and then swap. Pronounce schwa shortly and weakly. Circle the weak forms of grammatical words with schwa. (Volín, “Anglická” 10)

Thə 'lettə ə'rri:vəd ə'pproximəteli ət 'nine ə'clock. I 'recəgnizəd miy 'ʌŋkl̩
'Timəθi's 'hændwraɪtɪŋ ənd wəz 'ri:əli 'enəʒɪzəd 'aftə thə 'fɜrst 'fju 'li:nz. I 'ri:d
thət 'Timəθi ə'gri:d tə 'teɪk mi ɒn ən ɛkspə'dɪʃən tə the 'Aməzən 'fɔrəst. He hæz
'bi:n there 'sevrəl 'taɪmz bət 'nevə 'ɒfəd tə 'teɪk mi 'wɪθ hi:m. He 'brɔ:gt miy
'fæbləs 'pærət 'Jækəb frəm hi:s 'secənd ɛkspə'dɪʃən. 'Wɒt ə 'pɪti 'Nɪcəl̩ wəz 'so
ə'fraɪd əf məs'kwɪtoʊz ənd mə'ləriə. It wəd 'be mʌtʃ 'betə if miy 'ʌŋkl̩ 'tu:k hə,
'tu:.

- VI. **Jazz chant*** (Poesová, *Vliv* 203)

Boxes of Books

Boxes and boxes and boxes of books. (T)

Big books, small books, (S)

old books, new books.

Books on the bookshelf. (T)

Books on the floor. (S)

Books on the table next to the door. (T)

Books in the kitchen. (S)

Books in the hall. (T)

Books in the bedroom, (S)

BIG AND SMALL. (together)

APPENDIX 3: TEACHER'S NOTES TO THE ACTIVITIES

WEEK 1 – raising awareness

Introduction of schwa

- Write the transcription symbol /ə/ on the blackboard and ask the students whether they know what sound it represents
- it is the most common vowel in English – one of the reasons why it's important to be able to pronounce it (*illustrate it later in the exercises with partial transcription*)
- the “Friday afternoon” sound – relax your whole body, slump your shoulders, relax your face and mouth, and say /ə/, as if you are completely exhausted (Kelly 38)
(2 min)

I. Exploration of the oral cavity

a) *What do the lips do when we say /ə/?* (nothing – neutral position)

c) *What does the tongue do when we say /ə/?* (nothing, it stays in the centre of the mouth)
(5 min)

II. a) Write the vowel pairs on the blackboard. Demonstrate the activity on the word “Peru”. This activity can be done individually or with the whole class. Note down Ss' answers on the blackboard.

/ə i: ə i:/	/ə ɔ: ə ɔ:/	/ə u: ə u:/	/ɑ: ə ɑ: ə/	/ə æ ə æ/	/e ə e ə/
agre	award	Peru baloon	banana	attack	better

b) *Ask a couple of students to write their ideas on the blackboard.*
(5 min)

III. *Revise the stress mark and its function in transcription. Demonstrate on the word /pə'ru:/. Schwa is always in unstressed syllables, full vowels usually in stressed.* (3 min)

- IV. unstressed: quieter, lower, shorter (very often with schwa)
stressed: louder, higher, longer (always with a full vowel)

If the Ss are not able to describe the sound characteristics, write the adjectives on the blackboard in a jumbled order and ask Ss to circle the features of schwa and then match the adjectives with the syllable types.

(3 min)

- V. a) *This should be explained in Czech as well since these terms could be rather difficult for students to comprehend.*

b) *Ask a few Ss to come to the blackboard and draw a square around several prominence units.*

(5 min)

- VI. b) LENGTH – *make sure the Ss do not change loudness, just length*

e) *You can use the words from exercise III and add other examples, too. You can provide the students with elastic bands to show different lengths of stressed and unstressed syllables by pulling the bands correspondingly.*

(5 min)

- VII. a) **Shopping list:**

pepper

potatoes

pasta

yoghurt

/ə/

/ə/

/ə/

/ə/

bananas

lemon

carrots

newspaper

/ə/

/ə/

/ə/

/ə/

b) *Revise that schwa is never stressed and the auditory properties of stressed/unstressed syllables.*

c) *Before saying each word the prominence patterns could be demonstrated by humming.*

d) *Emphasise that schwa can be represented by different letters.*

(7 min)

WEEK 2

I. *Tell the students to imagine the “Friday afternoon” sound when they relax the whole body. (1 min)*

II. *Read the following words.*

seafood, lettuce, salmən, peaches, pizzə, octəpəs, soup, spicy, startə, vegetəb(ə)les, spinach, saləd, takeəway, fast food, MəcDon(ə)lds

Ask the students in which syllable they hear /ə/. (3 min)

III. a) *Read the words and ask the students in which syllable they can hear /ə/.*

Group 1	Group 2	Group 3	Group 4	Group 5
<u>mo</u> thə	<u>co</u> ach	<u>f</u> ashi(ə)nəble	<u>stadi</u> əm	<u>decide</u>
<u>wi</u> ndow	ref <u>er</u> ee	<u>h</u> ungry	c <u>ar</u> eer	disc <u>ov</u> ə
<u>qu</u> estiən	spectat <u>e</u>	<u>in</u> jəd	<u>sports</u> hall	c <u>om</u> pete

b) *Read the words again and ask the Ss to underline the stressed syllable in each word.*

(5 min)

IV. *Option c) presents the correct pronunciation of words Peter and China. (3 min)*

V. a) *Write the words on the blackboard.*

ge'ogrəphy convə'sati(ə)n pə'litic(ə)l ə'cadəmy 'intənət

b) *The words in Czech and English sound differently because of different word stress and reduced vowels. Have the students to come to the blackboard and mark the stressed syllables and schwa. Revise the main prominence unit.*

c) *Monitor and check with the whole class.*

(5 min)

VI. a) *Read the words. Ask the students to cover exercise c) or fold the sheet under exercise b) since exercise c) contains the key.*

am'bitiəs

ə'ggressiv

'sociəbl

dis'orgənised

inde'pendənt/ində'pendənt

ma'nipjələtiv

cəm'petətiv/cəm'petitiv

'genərəs

b) *Ask the students to mark prominence contrasts.*

c) *This is the first time that Ss are working with partial transcription. Write the following example on the blackboard and ask the students: What's the difference between these two forms? Elicit that schwa and word stress are marked in the second word.*

computer x cəm'putə

(10 min)

WEEK 3

- I. a) *Answer: the same pronunciation of “Bay cən” and “bacən”*

Mr Bay can cook bacon. = Mr 'Bay cən 'cook 'bacən.

b) *Tell the students to fold the handout on the dotted line to cover exercise c). Draw attention to the fact that prominence patterns can be found not only within words but also outside their boundaries – at the sentence level. Students check their answers in exercise c).*

c) *Ask the students to read the phrases in pairs. Monitor.*

(5 min)

- II. a) *Demonstrate the activity on the word engineer. Show the students how to hum the word stress – HMhmHMMMM.*

Key:

oO	Oo	OoO	oOoO	OoOo
for Jill	China	Ben was here	a piece of bread	bread and butter
Brazil	later	engineer	They shouldn't speak.	competition

b) *Read each column so that students can check their answers. Monitor when students read the expressions in pairs.*

(6 min)

- III. *Read the dialogue, using the strong form of from in (i) and the weak form in (ii). Students identify the difference.*

A: I've just got a letter.

B: Who's it frøm? (i)

A: It's frøm Jim. (ii)

(2 min)

IV. Explain that many grammatical words have both a weak and a strong form, e.g. have /hæv/ vs /həv/, can /kæn/ vs /kən/, at /æt/ vs /ət/ etc. The weak forms are much more common for everyday speech. The vowels in weak forms are shorter and usually reduced to schwa. The strong forms maintain full vowels. Revise what grammatical words are, e.g. auxiliary verbs, modal verbs, prepositions, pronouns....
(3 min)

V. a) Only weak forms with schwa were taken into consideration so as not to confuse students with too much information. Play the recording twice (Hewings 94-95, Track 17).

- 1) He threw the ball at me.
- 2) You must come over for dinner soon.
- 3) Bill and Mark have left.
- 4) Have you got more than Tom?
- 5) I was at home from five o'clock.
- 6) We could talk about it at lunch.
- 7) Ask them to come to the party.
- 8) Can you tell us now?
- 9) We were going to the park.
- 10) When do you get the results of your tests?
- 11) There should be some more in the box.
- 12) When are you taking him to see her?

b) Ask the students to check their answers.

c) Show the students that the weak forms and syllables containing schwa were replaced with the /ə/ symbol and the word stress is marked to help them. Play the sentences again and pause after each one for students to repeat. Students repeat chorally and individually.

Weak forms are used to make the speech faster and keep the natural rhythm of English language. They are important for fluent speech.

(15 min)

VI. Weak or strong?

a) Read the examples to the students.

b) *Read the sentences as weak or strong. Check students' answers.*

1) It's a 'glass of 'water. **S**

4) It's a 'vase of 'flowers. **S**

2) It's ə 'cup əv 'coffee. **W**

5) It's a 'newspaper. **S**

3) It's ə 'bowl əv 'fruit. **W**

6) It's ə 'piece əv 'chocolate. **W**

c) *Read all the sentences in exercise b) with weak forms and let the students repeat. Ask them to mark the stressed syllables and prominence contrasts.*

(6 min)

WEEK 4

- I. *Revise the information from WEEK 3. Remind the students of prominence contrasts at both word and sentence level, using the examples below. Revise the difference between stressed and unstressed syllables – louder, higher, longer x quieter, lower, shorter (1 min)*

fresh sə 'pplies This is fə 'John.

- II. a) *Read the following phrases as weak or strong. Demonstrate on the first 2 examples.*

- | | |
|--|--|
| 1) They are studying French. S | 4) My parents are moving next week. S |
| 2) What ə you doing? W | 5) The prices ə going down. W |
| 3) Don't worry. You ə doing fine. W | 6) We ə flying to China. W |

b) *Give each pair of students a picture where people are doing an activity. Drill the pronunciation first – the weak form of are plus linking. Monitor during the activity. (6 min)*

- III. a) *Play the recording twice if necessary.*

Key: at, was, the, and, had, a, was, the, was, was, the, at, a, for, a, of, and, a. (Latham-Koenig and Oxenden, *New English File* 29, exercise 2a, Track 32)

b) *Check students' answers. Monitor while they read the text. (6 min)*

- IV. a) *Demonstrate this activity on the first phrase. **

b), c) *Monitor.*

d) *Monitor. Then check students' answers.*

Key: 2. bread and water; 3. cookies and milk; 4. cake and ice cream; 5. chips and dip; 6. turkey and stuffing; 7. salt and pepper; 8. fish and chips.

e) *Demonstrate this activity on the examples. Monitor. (12 min)*

- V. *Ask the students to notice what happens when they shift the stress – prominence contrasts change. Key: DISCOVERY, MASCULINE. * (3 min)*

WEEK 5

I. Weak or strong?

a) *Revise with the students what they have learned about weak forms. Read the following phrases as weak or strong. Demonstrate on the first 2 examples.*

- | | |
|---|--|
| 1. He has gone home. S | 4. It has been raining all day. S |
| 2. What have you been playing? W | 5. We have just started. W |
| 3. They have been working in the garden. W | 6. Has he finished yet? W |

b) *Draw students' attention to the fact that /h/ is usually dropped in the middle of a sentence. Drill the WEAK pronunciation of the verb to have on the questions below. Encourage answering with the contracted forms – drill their pronunciation.*

(6 min)

II. a) *Write the dialogue on the blackboard so you or the students can write schwas under the weak forms. **Key:** are, you, for, a, to, some, and. Practise with the students the rhythm of the first line by using the DAdə language or humming. Then model the whole dialogue. Students repeat chorally.*

b) *Monitor and then ask a few students to read their dialogues to the class.*

(10 min)

III. *Read the phrases. Students should discover that the stress in b) was shifted to the first syllable. It was shifted in order to avoid the clash of two neighbouring stressed syllables.*

Key: Japanese

Chinese

Portuguese

Japanese food

Chinese medicine

Portuguese footballer

study Japanese

speak Chinese

learn Portuguese

(5 min)

IV. Weak or strong?

a) *Write the following sentences on the blackboard. Read them as weak or strong. Drill the WEAK pronunciation of the verb “to be” in the past simple.*

b) *The students don't write anything down. Monitor.*

(5 min)

V. *Monitor the students.*

Key: the, at, and, was, the, that, to, an, to, the, has, but, to, from, a, was, of, and, would, her. (6 min)

VI. Jazz chant

step 1 – the T reads the chant and beats the rhythm; pupils listen and read the text

step 2 – the T reads a phrase and pupils repeat after the T to the rhythm; both the T and pupils tap or beat the rhythm

step 3 – the T and pupils create two groups. The T starts chanting (the highlighted lines) and pupils respond to the rhythm; they read the last line together

step 4 – pupils practise the chant in pairs

step 5 – two or three pairs do the chant in front of the whole class

(5 min)

APPENDIX 4: STUDENTS' QUESTIONNAIRE

You took part in a pronunciation experiment and your teacher would like to know how you feel about it. Answer the following questions, please.

1. Did you enjoy the pronunciation activities? Why/why not?
2. Did you find the activities useful? Why/why not?
3. What was the most difficult thing for you?
4. Can you see any improvement in your pronunciation? Where exactly?

Thank you! 😊