Supplemental Material S2. Survey questions for each Delphi round.

ROUND ONE

SECTION 1 Consent

Q1.1. I consent to complete an online survey and for my responses to be used for the purposes described above.
Yes/No response. If no, skip to end of survey.

SECTION 2 Eligibility

The following questions ask you to confirm your eligibility to participate in this study.
If you have questions, then please email: deborah.denman@postgrad.curtin.edu.au.

Q2.1 Do you have (or are eligible for) certified practicing membership with Speech Pathology Australia?
Yes/No response. If no, skip to end of survey.

Q2.2 Have you spent more than 5 years (full-time equivalent) in the last 10 years engaged in assessment, intervention, education, or research activities related to students aged 4-18 years with language disorder?
For this study:
'Students with language disorder' refers to children and adolescents with oral or written language support needs (i.e., semantics, syntax, morphology, phonology, discourse, or pragmatics) regardless of primary diagnosis, severity, aetiology, or other co-morbidities associated with the language support needs. The focus of this study is mono-lingual English-speaking students.
'Activities' include:
a) Provision of clinical services (where approximately 50% or more of caseload is students aged 4-18 years with language disorder).
b) Research (where approximately 50% or more of research activities relate to students aged 4-18 years with language disorder).
c) Professional supervision/support, academic teaching, resource development or consultancy (where approximately 50% or more of professional activities relate to services for children aged 4-18 years with language disorder).
d) Combination of the above.
Yes/No response. If no, skip to end of survey.

SECTION 3 Demographics

The purpose of the following questions is to gather information on the demographics of the experts participating in the Delphi Study.

Q3.1. Please indicate the option(s) that best describe the sector(s) in which you are currently employed as a speech pathologist (or in other work related to child language development or

education). Select a maximum of 2 options.
Multiple choice response with open text box for 'other' responses

Q3.2. Please indicate your (completed) qualifications. Note: It is not necessary to indicate qualifications that are unrelated to speech pathology, child development or education.
Multiple choice response with open text box for 'other' responses.

Q3.3. Please indicate the number of years in total (full-time equivalent) that you have worked as a speech pathologist (or in other employment related to child language development or education).
Multiple choice response.

SECTION 4 Taxonomy agreement and intervention categorisation

For the remaining questions on this survey, you will need to refer to the document in the following link: Delphi Study Reference Sheet.
Remember that you are able to leave this survey (multiple times) and come back later to where you left off, as long as you use the same computer and same web-browser each time. You do not have to click a 'save' button, just close the survey window, and use the link to open the survey up again later. Before proceeding, please read the background information and overview of the taxonomy on pages 1-8 of the Delphi Study Reference Sheet.

Aspect One
Please refer to the document titled: Delphi Study Reference Sheet. Consider the information presented regarding the structure of Aspect I-A & I-B (Language Domain) on pages 9-11.

[Screenshot of Aspect I from taxonomy flowchart included here]
This aspect is the same for both assessment and intervention. The categories in this aspect are not mutually exclusive (i.e., assessments and interventions may target multiple domains).

Q4.1 Overall, the structure of Aspect I seems useful for describing the broad target areas for spoken language assessments and interventions for school aged children.
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then the next question is displayed.

Q4.2. Please indicate what changes you would make to the structure of Aspect I (Language Domain) and where possible, provide references or reasoning.
Open text box.

Q4.3 Do you agree with the definitions provided for the components of Aspect I (Language Domain)?
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then the next question is displayed.

Q4.4. Please indicate what changes you would make to the definitions for Aspect I (Language Domain) and where possible, provide references.
Open text box.

To examine the usefulness of the proposed taxonomy for classifying interventions in a meaningful and consistent way, you are now asked to consider the following interventions and how they would be categorized according to the taxonomy in its current form.

To ensure that the Delphi Study participants all have the same understanding of each intervention, please click on the intervention names below and read the half page summaries before categorising the intervention (note: we do ask that you read the extra information in these links).

Active Listening for Active Learning (Johnson & Player, 2009)

Shape Coding Intervention (Ebbels, 2007)

Picture Exchange Communication System PECS (Bondy & Frost, 1994)

Robust Tier Two Vocabulary Instruction (Beck et al., 2002)

If you do not feel that you know a particular intervention well enough to categorize it, then click in column one ('unfamiliar') for that particular intervention and do not complete other columns.

If you are familiar with the intervention, then leave column one blank and select answers from the other columns. Refer to the information in the 'Delphi Study Reference Sheet' pages 10-11 when categorising. If unsure about any answers, then try to select the option/s that you think best fit.

Q4.5 Please categorize Active Listening for Active Learning (Johnson & Player, 2009) according to Aspect I (Intervention Language Domain) of the proposed taxonomy.

Multiple choice response: 'unfamiliar', 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'.

Q4.6 Please categorize Shape Coding Intervention (Ebbels, 2007) according to Aspect I (Intervention Language Domain) of the proposed taxonomy.

Multiple choice response: 'unfamiliar', 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'.

Q4.6 Please categorize Picture Exchange Communication System PECS (Bondy & Frost, 1994) according to Aspect I (Intervention Language Domain) of the proposed taxonomy.

Multiple choice response: 'unfamiliar', 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'

Q4.6 Please categorize Robust Tier Two Vocabulary Instruction (Beck et al., 2002) according to Aspect I (Intervention Language Domain) of the proposed taxonomy.

Multiple choice response: 'unfamiliar', 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'.

Q.4.7 If you have any comments about Aspect I (Intervention Domain) or the categorisation of interventions within this aspect, please comment here.
Open text box

[Questions 4.1-4.7 repeated for taxonomy Aspects II, III, IV and IV. Screenshots of the flowchart are provided and any instructions specific to particular Aspects are provided with survey questions]

SECTION 5 Overall Agreement

You are now asked your opinion on the overall structure of the taxonomy (i.e., number of aspects and sequence or layout of aspects). Refer to the document titled Delphi Study Reference Sheet, pages 5-8.

Q5.1 The overall structure of the taxonomy seems useful for describing assessments and interventions for school aged children.
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then next question is displayed.

Q5.2. Please comment on what you would add, remove, or change with regards to the overall structure of the taxonomy. Where possible, provide references or reasoning.
Open text box

SECTION 6 Other Comments

Q5.3 Do you have any other comments or feedback regarding this proposed taxonomy that have not been provided elsewhere? If so, please write here.
Open text box

ROUND TWO

SECTION 1 Consent

Q1.1. I consent to complete an online survey and for my responses to be used for the purposes described above.
Yes/No response. If no, skip to end of survey.

SECTION 2 Eligibility

Only participants who completed round one (i.e., progressed to the last page with the statement 'Thank-you for completing this survey') are able to complete round two. This is because the content of round two requires participants to have the background information from round one.
If you have any questions about your participation, then please email:
deborah.denman@postgrad.curtin.edu.au

Q2.1 Did you complete the Round One survey in this Delphi Study?
Yes/No response. If no, skip to end of survey.

SECTION 3 Demographics and email

The purpose of the following questions is to gather information on the demographics of the experts participating in the Delphi Study.

Q3.1. Please indicate the option(s) that best describe the sector(s) in which you are currently employed as a speech pathologist (or in other work related to child language development or education). Select a maximum of 2 options.
Multiple choice response with open text box for 'other' responses.

Q3.2. Please indicate your (completed) qualifications. Note: It is not necessary to indicate qualifications that are unrelated to speech pathology, child development or education.
Multiple choice response with open text box for 'other' responses.

Q3.3. Please indicate the number of years in total (full-time equivalent) that you have worked as a speech pathologist (or in other employment related to child language development or education).
Multiple choice response.

The following question asks you to provide your email address. This question is optional. The reasons you are asked for your email address include:
1. To allow individual participants to be accurately tracked between round two and round three for calculation of stability (i.e., change) in level of agreement between rounds. If participant responses remain highly stable (i.e., similar) between rounds, this will add strength to the level of consensus.

2. To allow us to contact participants individually if need arises e.g., provide individualized feedback to participants on their responses in relation to group responses, if it is felt that this will be beneficial with obtaining agreement in the final round.

If you provide your email address, the identity of your responses will be visible to supervising investigators who export the data from the survey software and de-identify it for data analysis. As the demographic questions are the same across rounds, this may also make your round one responses more easily identifiable to you. Your identity will not be known to anyone else, including the student researcher who will be blinded to the identity of participant responses when analyzing comments.

If you do not provide your email address, then your responses will remain unattached to your identity.

Q3.4 Please provide your email address here:
Open text response.

SECTION 4 Taxonomy Agreement

Please open the document in this link: Delphi Study Feedback Sheet R2
This document summarizes the results of round one and explains the content of round two. Whilst you do not have to read all the details in the tables, it is important that you understand the findings from round one and the aims of round two.

Now, please open the document in this link: Delphi Study Reference Sheet v2.
You will need to refer to this document whilst completing the questions in this survey. This document is the same as the document for Round One, with changes/additions indicated in red font. You do not have to read this entire document; however, you do need to read and consider the changes indicated in red font.

Remember that you are able to leave this survey (multiple times) and come back later to where you left off, as long as you use the same computer and same web-browser each time. You do not have to click a 'save' button, just close the survey window and use the link to open the survey up again later.

Aspect One

Please refer to the document in the link: Delphi Study Reference Sheet v2. Consider the information presented regarding the structure of Aspect I-A & I-B (Modalities/Domains) on pages 9-11.

[Screenshot of Aspect I from taxonomy flowchart included here]
This aspect is the same for both assessment and intervention. The categories in this aspect are not mutually exclusive (i.e., assessments and interventions may target multiple domains); however, categorisation is based on the modalities/domains that are primarily measured or targeted in the assessment or intervention.

Q4.1 Overall, the structure of Aspect I seems useful for describing the broad target areas for spoken language assessments and interventions for school aged children.

Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then next the question is displayed.

Q4.2. Please indicate what changes you would make to the structure of Aspect I (Language Domain) and where possible, provide references or reasoning.
Open text box.

Q4.3 Do you agree with the definitions provided for the components of Aspect I (Language Domain)?
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected then the next question is displayed

Q4.4. Please indicate what changes you would make to the definitions for Aspect I (Language Domain) and where possible, provide references.
Open text box.

[Questions 4.1-4.4 repeated for taxonomy Aspects II, III, IV and IV. Screenshots of the flowchart are provided and any instructions specific to particular Aspects are provided with survey questions]

SECTION 5 Overall Agreement

You are now asked your opinion on the overall structure of the taxonomy (i.e., number of aspects and sequence or layout of aspects). Refer to the document titled Delphi Study Reference Sheet, pages 5-8.

Q5.1 The overall structure of the taxonomy seems useful for describing assessments and interventions for school aged children.
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then the next question is displayed.

Q5.2. Please comment on what you would add, remove, or change with regards to the overall structure of the taxonomy. Where possible, provide references or reasoning.
Open text box.

Q5.3 Do you have any other comments or feedback regarding this proposed taxonomy that have not been provided elsewhere? If so, please write here.
Open text box.

SECTION 6 Intervention categorisation

You are now asked to consider two case studies, each describing language interventions that may occur for school-aged students. You will be asked to describe the intervention in each case study according to the proposed taxonomy.

You do not need to be familiar with the intervention approaches in order to complete the questions. In fact, we ask that you do not consider information that is not given in the case study. The purpose is to determine if language experts apply the taxonomy in the same way when categorising based on the same information. Even if you think of different ways that these intervention approaches could be conducted; or even if you conduct these approaches differently yourself, please only categorize based on how the intervention is conducted in the case study.

Note: These case studies were created for the purposes of the Delphi Study. They have been kept succinct (for the ease of Delphi Study participants) and are not intended to be fully comprehensive descriptions of an intervention process. They are not intended to be examples of 'recommended practice' nor are they intended to represent how interventions are most frequently delivered in SLP practice.

Please describe the following interventions according to Aspect I (Intervention Domain) of the proposed taxonomy.
When answering, refer to the Delphi Study Reference Sheet v2, pages 10-11.
Click on the links below to open the intervention case studies:
Case study one - Intervention for Meg (PECS)
Case study two - Year 8 Science (Vocabulary)
Remember to only describe the interventions as they are used in the case studies (not as they may be used elsewhere)
Note: If you accidentally select an answer you don't want, you may uncheck it by clicking again.

Q6.1 Please categorize Case study One - Intervention with Meg
Multiple choice response: 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'.

Q6.2 Please categorize Case study two - Year 8 Science
Multiple choice response: 'spoken', 'written', 'comprehension', 'production', 'semantics', 'morphosyntax', 'social abilities', 'discourse', 'meta-abilities', 'executive functioning'.

[Questions 6.1 and 6.2 repeated for taxonomy Aspects II, III, IV and IV. Any instructions specific to particular Aspects are provided with survey questions]

SECTION 7 Other comments

If you have any comments about the taxonomy for describing interventions (either the interventions in the case studies or other interventions), then please comment here.
Open text response.

ROUND THREE

Q1.1. I consent to complete an online survey and for my responses to be used for the purposes described above.
Yes/No response. If no, skip to end of survey.

SECTION 2 Eligibility

Only participants who completed round two (i.e., progressed to the last page with the statement 'Thank-you for completing this survey') are able to complete round three.
If you have any questions about your participation, then please email:
deborah.denman@postgrad.curtin.edu.au

Q2.1 Did you complete the round two survey in this Delphi Study?
Yes/No response. If no, skip to end of survey.

SECTION 3 Demographics and email

The purpose of the following questions is to gather information on the demographics of the experts participating in the Delphi Study.

Q3.1. Please indicate the option(s) that best describe the sector(s) in which you are currently employed as a speech pathologist (or in other work related to child language development or education). Select a maximum of 2 options.
Multiple choice response with open text box for 'other' responses

Q3.2. Please indicate your (completed) qualifications. Note: It is not necessary to indicate qualifications that are unrelated to speech pathology, child development or education.
Multiple choice response with open text box for 'other' responses

Q3.3. Please indicate the number of years in total (full-time equivalent) that you have worked as a speech pathologist (or in other employment related to child language development or education).
Multiple choice response

The following question asks you to provide your email address. This question is optional. The reasons you are asked for your email address include:
1. To allow individual participants to be accurately tracked across rounds for calculation of stability (i.e., change) in level of agreement between rounds.

2. To allow us to contact participants individually if need arises
If you provide your email address, the identity of your responses will be visible to supervising investigators who export the data from the survey software and de-identify it for data analysis. As the demographic questions are the same across rounds, this may also make your round one responses more easily identifiable to you. Your identity will not be known to anyone else, including the student researcher who will be blinded to the identity of participant responses when analyzing comments.

If you do not provide your email address, then your responses will remain unattached to your identity.

Q3.4 Please provide your email address here:
Open text response

SECTION 4 Taxonomy Agreement

Round Two Results

Taxonomy structure and definitions:
In both rounds one and two, agreement was reached with regards to the structure and definitions of the taxonomy. In round two, at least 88% of participants selected 'strongly agree' or 'agree' for each aspect of the taxonomy and 100% of participants 'strongly agreed' or 'agreed' with the overall structure of the taxonomy. No participants selected 'strongly disagree' for any aspect. Given the high consensus across repeated rounds, it is confirmed that expert consensus has been reached on the structure of, and definitions within, the taxonomy.

Application of taxonomy for describing assessments and interventions:
In round two, agreement was reached with regards to the categorisation of assessment and intervention case studies on some aspects of the taxonomy, but not on other aspects. The aspects that lacked consensus in round two were mostly the same aspects that lacked consensus in round one. This indicates that, although expert consensus was reached with regards to the structure of the taxonomy, there are aspects of the taxonomy that are challenging to apply when describing assessments and interventions. This may be due to lack of clarity within the taxonomy; or may be due to issues outside of the taxonomy that influence how SLPs describe different assessments and interventions.

In round three, components where agreement was not reached are further explored. Participants are asked to reconsider the same case studies from round two; categorize the case studies on the components that did not reach agreement; and then consider the reasons why consensus may be more difficult for these particular components or particular case studies.

If you wish to see further details of the round two results, please view the document in the following link: Round Two Participant Feedback Sheet

The structure and definitions of the taxonomy are the same as round two, with two exceptions:

1. Extra examples and/or clarifying statements were added to some components to assist with application of the taxonomy. These additions are included in the questions in this survey, or you may wish to look at the Participant Reference Sheet in the following link: Participant Reference Sheet v3

2. The aspect I-A & I-B categories 'Social Abilities' and 'Discourse' were merged into a single category called 'Social-Abilities & Discourse'. This change was made to address difficulties in defining two distinctive, mutually exclusive categories (i.e., to address overlap between the two categories). The definitions within these categories are largely unchanged; however, as this is structural change to the taxonomy, participants are asked to indicate their level of agreement with the merger (see below).

[Definition for 'social abilities and discourse' included here]

Q4.1 Please indicate your level of agreement with the merged category 'Social-Abilities & Discourse'.
Five-point Likert scale response i.e., 'Strongly agree', 'Agree', 'Neither agree or disagree', 'Disagree', 'Strongly Disagree'. If 'Strongly agree' or 'Agree' is not selected, then next question is displayed.

Q4.4. Please indicate why you do not agree with the category 'Social Abilities & Discourse':
Two choice answer:
'I prefer the two separate categories of Social Abilities and Discourse (i.e., as they were in round two').
'Other reason. Please specify' with open text response.

SECTION 5 Intervention Categorisation

The last part of the survey asks you categorize the same intervention case studies from round two (with only very minor adjustments if any) on the categories that were not agreed upon in round two.

As per round two, you do not need to be familiar with the interventions in the case studies in order to describe them using the taxonomy. The purpose is to determine if language experts apply the taxonomy in the same way when categorising from the same information. Therefore, even if you think of different ways that the interventions could be conducted; or even if you conduct these interventions differently yourself, it is important that you only categorize based on how the intervention is conducted in the case study.
Note: These case studies were created for the purpose of this Delphi Study. They are not intended to be examples of 'recommended practice' nor are they intended to represent how interventions are most frequently used in SLP practice.

Links for case studies:
Case study one: Intervention for Meg (PECS)
Case study two: Year 8 Science (Vocabulary)

Read the case studies and the category definitions provided in the tables below, then answer the questions.
If you wish to see the reference list, or read the background information for any of the definitions, then please refer to the Participant Reference Sheet v3
Should you accidentally select a survey answer that you don't want, you may uncheck it by selecting the answer that you do want.

Aspect I

Case Study One: Intervention for Meg
In round two, participants:
Agreed that 'Spoken Language', 'Production' and 'Social-Abilities/Discourse' apply to this intervention.
Agreed that 'Written Language', 'Syntax', 'Meta-Abilities' and 'Executive Functions' do not apply to this intervention.
Note: Interventions are described by the specific modalities and domains that are targeted i.e., the modalities and domains specifically addressed in goals for the immediate therapy block and measured as an intervention outcome.

Participants were not in agreement with regards to 'Semantics' and 'Comprehension'. Definitions for these two categories are in the table below (if you wish to read background and references, please see the Participant Reference Sheet v3: pages 9-12)
[Definitions included here]

Q5.1 Please indicate if you think one of these categories describes case study 3:
Multiple choice response: semantics, comprehension, none of these. Participants could both select 'semantics', and 'comprehension' as these are from different components and are not mutually exclusive; however, participants could not select 'none of these' and another response.

Q5.2 If the components 'Comprehension' and 'Semantics' do not reach consensus for case study one (intervention for Meg) during round three, what do you think would be the reason?
Multiple choice answer. Participants could select one of the following responses:
There is overlap between categories, which makes categorisation difficult. If so, please indicate which categories overlap – open response box provided.
Category definition/s lack clarity or may be open to misinterpretation. If so, please indicate which definitions are unclear – open response box provided.
Category name/s are used differently in other literature which may cause misinterpretation when applying this taxonomy. If so, please indicate which category name/s are open to misinterpretation – open response box provided.
The case study lacks information needed to categorize. If so, please indicate what information is lacking – open response box provided.
Don't know why there is lack of consensus for these components.
Other reason. Please specify – open response box provided.

Case study Two: Year 8 Science

In round two, participants:
Agreed that 'Spoken Language', 'Written language' 'Comprehension', 'Production' and 'Semantics' apply to this intervention.
Agreed that 'Executive Functions' does not apply to this intervention.
Note: Interventions are described by the specific modalities and domains that are targeted i.e., the modalities and domains specifically addressed in goals for the immediate therapy block and targeted as an intervention outcome.

Participants were not in agreement with regards to 'Morphosyntax', 'Social Abilities/Discourse', and 'Meta-Abilities'. Definitions for these categories are provided below (for background and references, please see the Participant Reference Sheet v3: pages 9-12):
[Definitions included here]
Q5.3 Please indicate if you think one of these categories describes case study two.
Multiple choice response: 'morphosyntax', 'social abilities/discourse', 'meta-abilities', 'none of these'. Participants could both select 'morphosyntax', 'social abilities/discourse', 'meta-abilities' as these are not mutually exclusive; however, participants could not select 'none of these' and another response.

Q5.4 If the components 'Morphosyntax' and 'Social Abilities & Discourse' and 'Meta-Abilities' do not reach consensus for case study two (Year 8 Science) during round three, what do you think would be the reason? (select one answer)
Multiple choice answer. Participants could select one of the following responses:
There is overlap between categories, which makes categorisation difficult. If so, please indicate which categories overlap – open response box provided.
Category definition/s lack clarity or may be open to misinterpretation. If so, please indicate which definitions are unclear – open response box provided.
Category name/s are used differently in other literature which may cause misinterpretation when applying this taxonomy. If so, please indicate which category name/s are open to misinterpretation – open response box provided.
The case study lacks information needed to categorize. If so, please indicate what information is lacking – open response box provided.
Don't know why there is lack of consensus for these components.
Other reason. Please specify – open response box provided.

[Questions 5.1-5.4 repeated for categories in Aspects II, III, IV and IV that did not reach consensus in round two. Relevant definitions are provided and any instructions specific to particular Aspects are provided with survey questions]

SECTION 6 Final comments

Q6.1 If you have any other comments or feedback regarding the taxonomy for describing interventions (either the case studies or other interventions), then please comment.
Open response box.