



# The health and well being of those who did not flourish at school: Does adult learning help?

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# Policy concerns

- Skills white papers
- 14-19 white paper
- DfES 5 year strategy document
- Skills for life
- Older people strategy document
- Every child matters, 10 year childcare strategy, reform of childcare workforce
- Green paper on young people + PAT 12
- Skills review of UK economy
- Healthy living white paper (DH)
- Wanless 2: Securing Good Health for the Whole Population
- HO 5 year strategy document

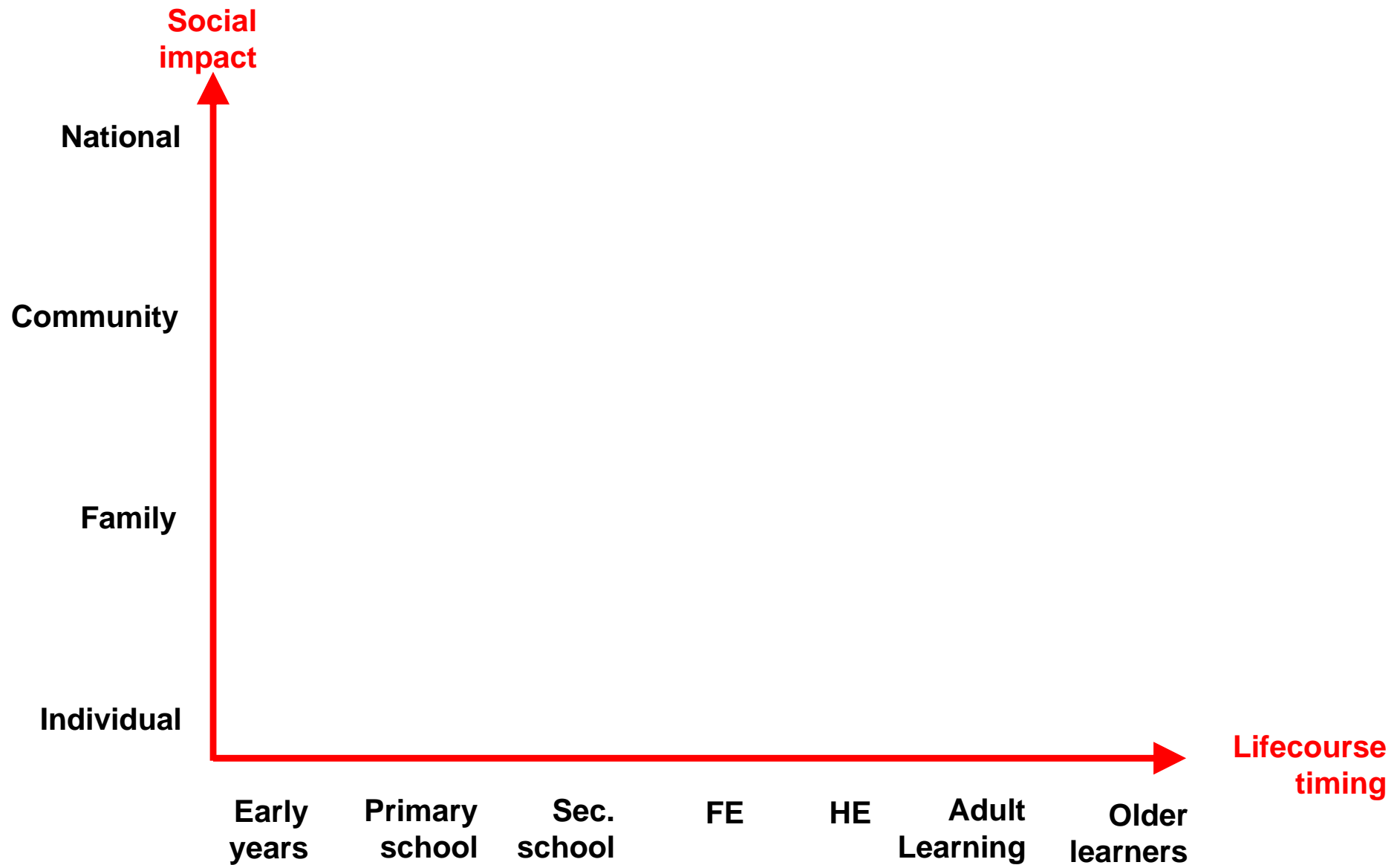


# Key policy questions

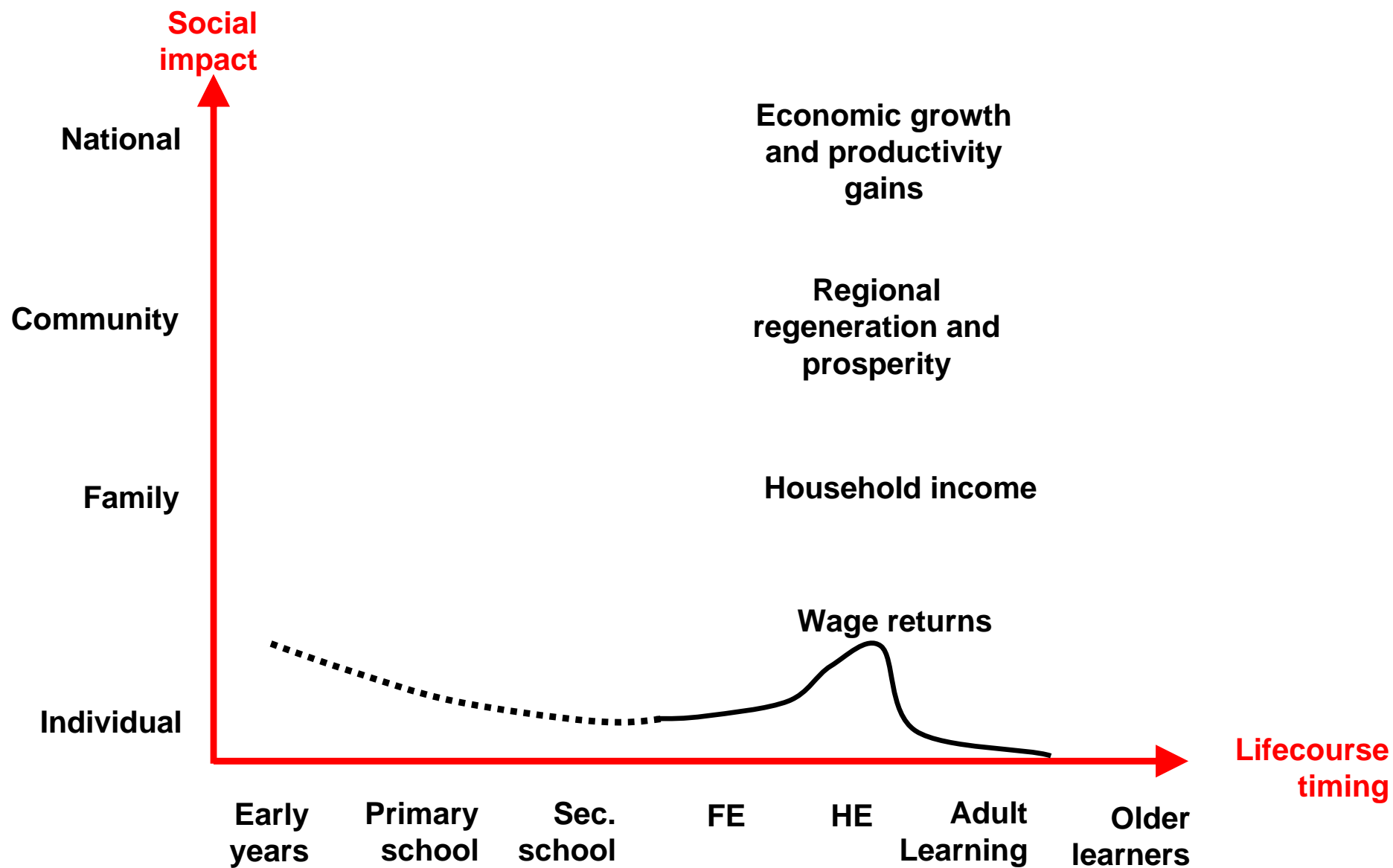
1. What provision, at what age, for whom, and why?
  - Complementarity through the lifecourse
  - The problem of combining engagement and standards
  - Issues of choice and social markets
  - The integration of services
  - Quality
  - Progression
  - Personalisation



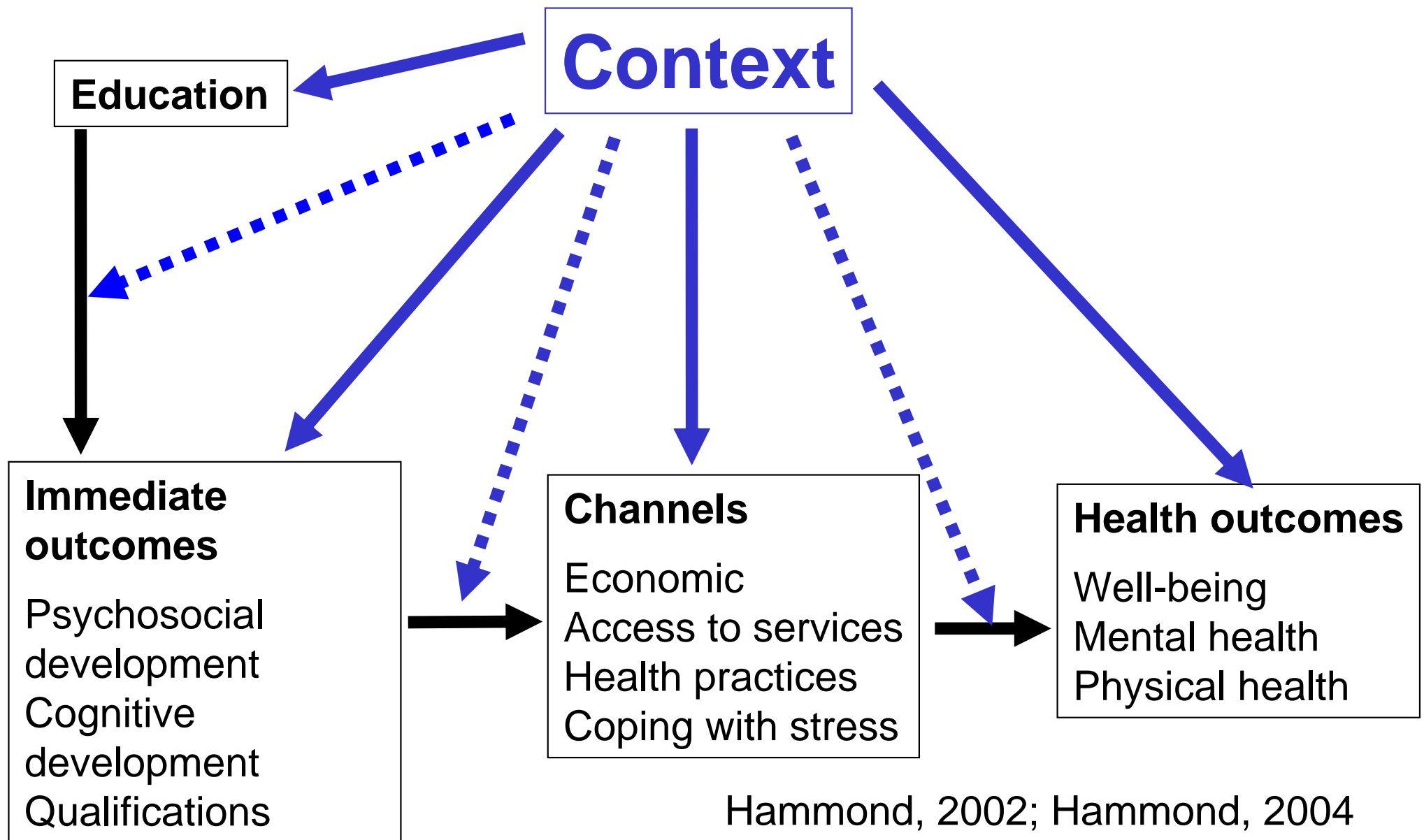
# The terrain of the benefits of learning



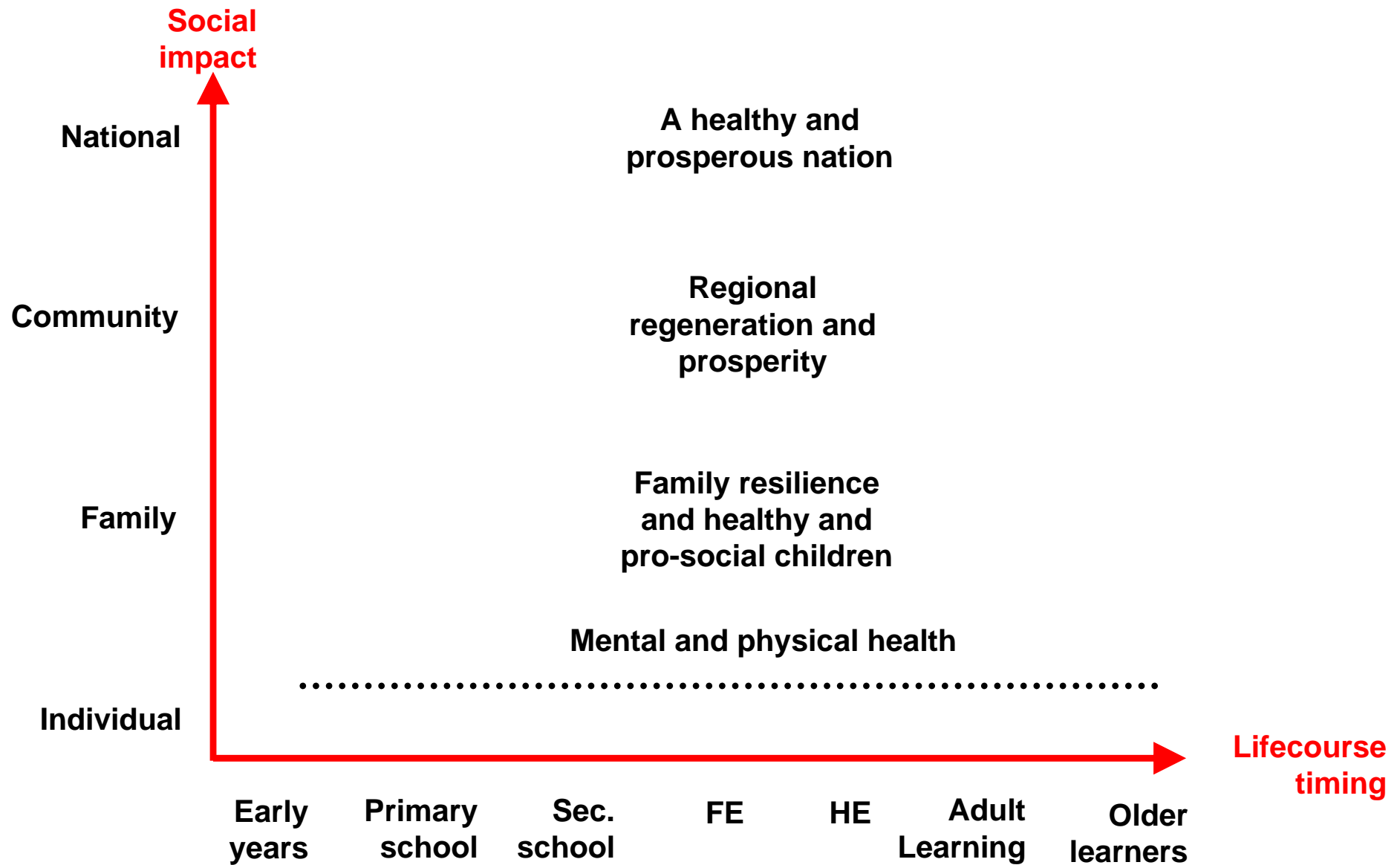
# The wage benefits



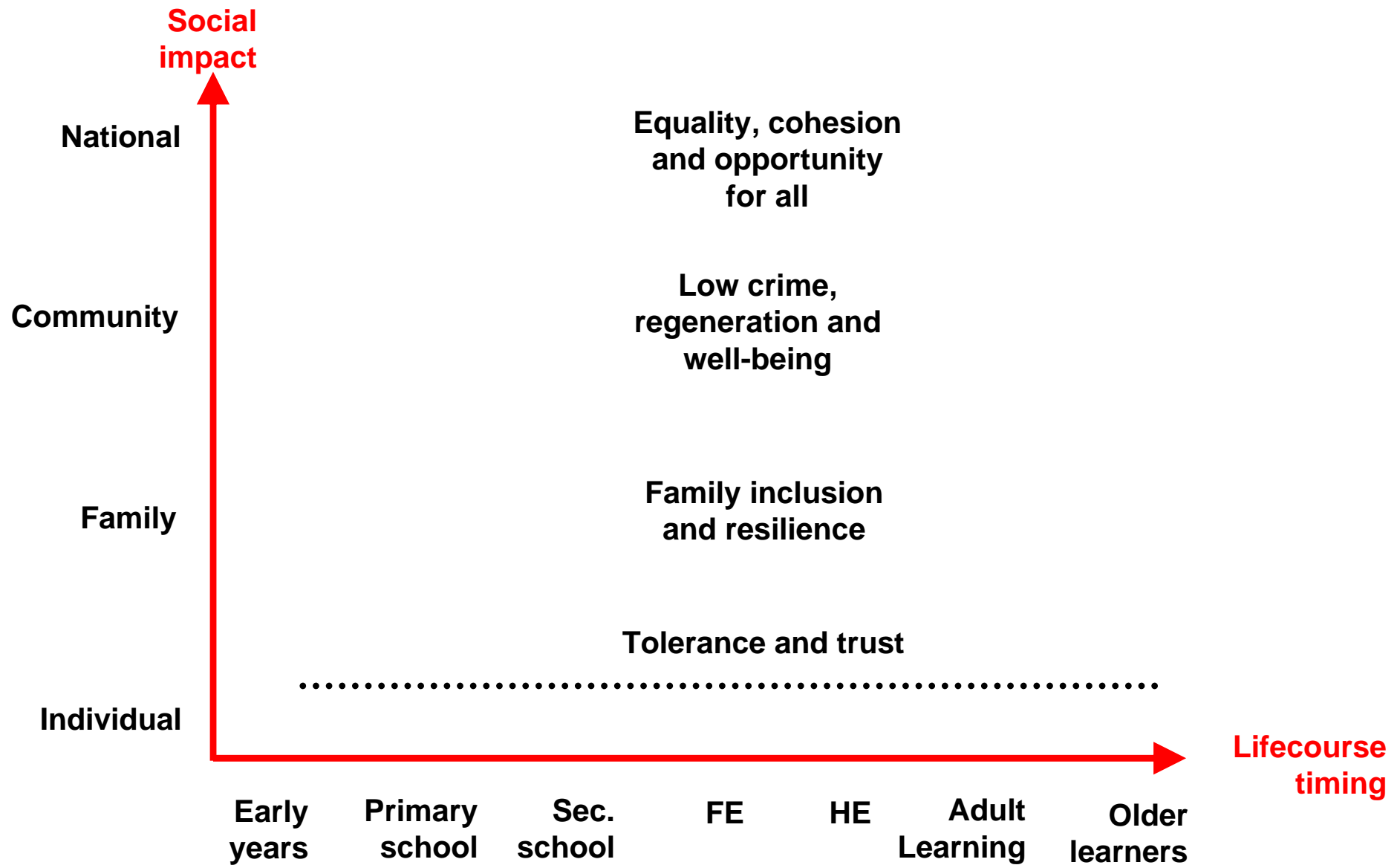
# How education promotes individual health and well-being



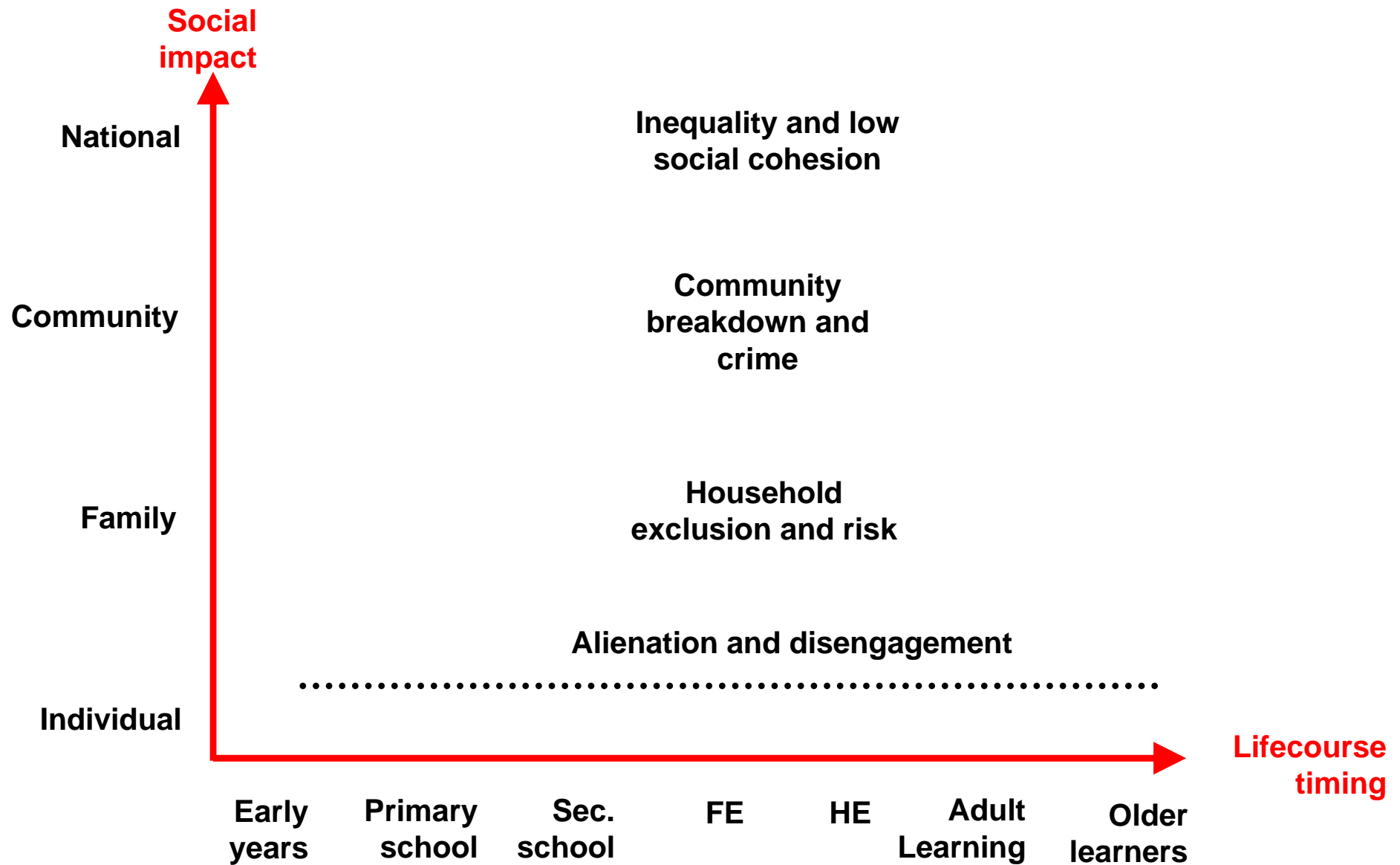
# The health benefits



# The social cohesion benefits



# The dis-benefits of unequal access



# Some caveats and complexities

- Education can undermine as well as promote health
- Effects of education depend on match between provision and interests and needs of the learner
- Learners' receptivity to learning depends on their context
- The evidence base is weak



# Research questions for WBL Project H1 (An epidemiological analysis)

1. What is adult well being and health like for people who did not flourish at secondary school?
2. Does adult learning contribute to sustaining or transforming the well being and health of this group?



# National Child Development Study (NCDS)

- All babies born in Britain during a week in 1958
- Followed up at 7, 11, 16, 23, 33, 42 (in 2000)
- Information from cohort members, parents, teachers, health visitors
- Representative of that cohort in Britain



# Proxy measures of poor attainment and disengagement from school

	<b>Name</b>	<b>%</b>
<b>Attainment</b>	Poor maths	12
	Poor reading	16
	No Os	53
<b>Attendance</b>	Truants	52
	Poor attenders	20
<b>Adjustment</b>	Externalisers	20
	Internalisers	18
<b>Attitudes</b>	Negative attitudes	20



## Proxy measures of poor attainment and disengagement from school (cont.)

	<b>Name</b>	<b>%</b>
<b>Combinations</b>	No Os engaged	29
	No Os disengaged	21



# Adult health outcomes (binary)

	<b>Definition</b>	<b>Obs</b>	<b>%</b>
<b>Empowerment</b>	Low life satisfaction so far	10,629	43
	Low optimism	10,565	42
	Low self-efficacy	10,393	28
<b>Malaise</b>	Low self-rated health	11,274	25
	Depression	11,327	7
	Migraines	11,373	19
	Back pain	11,373	47



# Adult health outcomes (binary)

	<b>Definition</b>	<b>Obs</b>	<b>Mean</b>
<b>Physical conditions</b>	Hay fever	11,373	32
	Asthma or bronchitis	11,373	18
	Skin problems	11,374	17
<b>Health practices</b>	Smoking	11,353	33
	Excessive drinking	11,405	19
	Little exercise	11,311	31
	Obesity	11,020	11



# The adult health and well being of those who did not flourish at secondary school (RQ1)

- Does not flourishing at secondary school simply act as a proxy for childhood factors that predict poor health in adulthood?
- Is there something about not flourishing at secondary school, over and above social, family circumstances and child health, that predicts poor health in adulthood?



# Controls

Control set 1: 6 childhood risk variables

- father ses 4/5, born to mother under 20, mother/father left school at min age, 3+kids at 11, fsm at 11

Control set 2: 6 age 7 health variables

- health condition, constituting handicap, Rutter score (parent), danger of becoming obese (top 15% bmi by gender), sensory defect, handicap

Control set 3: 8 age 7 'ability' variables

- reading, writing, maths, number, oral, creativity, draw-a-man, knowledge



# Odds ratios for low efficacy at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.39	0	1.48	0
<b>Full controls</b>	1.07	0.43	1.18	0.06
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	2.12	0	1.95	0
<b>Full controls</b>	1.57	0	1.49	0



# Odds ratios for low optimism at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	0.84	0.02	0.88	0.07
<b>Full controls</b>	0.88	0.11	0.92	0.30
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	0.99	0.94	1.09	0.33
<b>Full controls</b>	1.06	0.52	1.12	0.23



# Odds ratios for low self-rated health at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.36	0	1.09	0.30
<b>Full controls</b>	1.21	0.03	0.93	0.42
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	1.48	0	1.84	0
<b>Full controls</b>	1.22	0.05	1.50	0



# Odds ratios for depression at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.17	0.22	1.21	0.27
<b>Full controls</b>	0.81	0.13	0.88	0.47
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	2.86	0	2.42	0
<b>Full controls</b>	2.12	0	1.75	0



# Odds ratios for back pain at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	0.98	0.75	0.99	0.86
<b>Full controls</b>	0.90	0.19	0.96	0.61
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	1.16	0.08	1.30	0
<b>Full controls</b>	1.10	0.31	1.23	0.02



# Odds ratios for smoking at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.18	0.03	1.00	0.98
<b>Full controls</b>	0.95	0.56	0.88	0.10
<b><u>NoOs diseng</u></b>				
<b>No controls</b>	4.09	0	2.98	0
<b>Full controls</b>	3.47	0	2.75	0



# Odds ratios for exercise at age 33

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
No controls	1.29	0	0.96	0.59
Full controls	1.15	0.08	0.86	0.07
<b><u>NoOs diseng</u></b>				
No controls	1.32	0	1.77	0
Full controls	1.12	0.23	1.56	0



## Key findings (RQ1)

- After adjusting for background factors, not flourishing at secondary school is associated with low life satisfaction, efficacy, self-rated health, higher rates of depression, migraines, back pain, smoking, drinking excessively, and taking little exercise.
- Both attainment and engagement at secondary school matter for adult health and well being



# Does adult learning help? (RQ2)

## ORs for participation in adult learning 33 - 42

	OR	P-val	OR	P-val
<b><u>NoOs engaged</u></b>				
No controls	0.60	0	0.77	0
Full controls	0.71	0	0.91	0.24
<b><u>NoOs diseng</u></b>				
No controls	0.53	0	0.60	0
Full controls	0.69	0	0.76	0.01



# Controls

Control set 1: 6 childhood risk variables

- father ses 4/5, born to mother under 20, mother/father left school at min age, 3+kids at 11, fsm at 11

Control set 2: 6 age 7 health variables

- health condition, constituting handicap, Rutter score (parent), danger of becoming obese (top 15% bmi by gender), sensory defect, handicap

Control set 3: 8 age 7 'ability' variables

- reading, writing, maths, number, oral, creativity, draw-a-man, knowledge

Control set 4: 15 age 33 variables

- Socio-economic status, qualifications



# Sustained and transformed health

Poor health o/c at age		Sustained health	Transformed health
33	42		
0	0	1	N/A
0	1	0	N/A
1	0	N/A	1
1	1	N/A	0



## Odds ratios for empowerment (transformed efficacy and optimism) contingent on AL between 33 and 42

	<b>Efficacy</b>		<b>Optimism</b>	
<b><u>Whole cohort</u></b>				
<b>No controls</b>	1.15	0.06	1.33	0
<b>Full controls</b>	1.24	0.01	1.34	0
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.10	0.56	1.13	0.45
<b>Full controls</b>	1.34	0.18	1.39	0.10
<b><u>NoOs dis</u></b>				
<b>No controls</b>	1.44	0.07	1.48	0.06
<b>Full controls</b>	1.70	0.05	1.67	0.06



# Odds ratios for transformed self-rated health and depression contingent on AL 33 - 42

	Self-rated health		Depression	
<b><u>Whole cohort</u></b>				
<b>No controls</b>	1.46	0	1.29	0.13
<b>Full controls</b>	1.23	0.03	1.16	0.46
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	1.42	0.05	1.83	0.12
<b>Full controls</b>	1.36	0.24	-	-
<b><u>NoOs dis</u></b>				
<b>No controls</b>	2.07	0	1.00	0.99
<b>Full controls</b>	2.13	0.01	-	-



# Odds ratios for transformed health practices contingent on AL 33 - 42

	<b>Smoking</b>		<b>Exercise</b>	
<b><u>Whole cohort</u></b>				
<b>No controls</b>	1.47	0	1.27	0
<b>Full controls</b>	1.26	0.01	1.28	0.02
<b><u>NoOs engaged</u></b>				
<b>No controls</b>	0.94	0.77	1.29	0.12
<b>Full controls</b>	0.90	0.64	1.24	0.27
<b><u>NoOs dis</u></b>				
<b>No controls</b>	1.71	0.01	1.29	0.19
<b>Full controls</b>	2.07	0.01	1.13	0.64



# Key findings (RQ2)

- AL is associated with empowerment, giving up smoking and taking more exercise, regardless of the level of flourishing at secondary school.
- No evidence for associations between AL and changes in depression, excessive drinking or obesity.
- Odds are generally larger for those who did not flourish at secondary school (but not statistically significantly).
- AL more strongly associated with transforming than sustaining health and well being.
- Fewer adults who did not flourish at secondary school take courses as adults.



# Conclusions

For the cohort born in Britain in 1958:

- Failure to flourish at secondary school is a very strong marker for poor adult health and well-being across all domains.
- AL is associated with some small improvements in the relatively poor well being and lifestyles of those who did not flourish at secondary school.
- AL is not associated with either widening or narrowing the gap between the health and well being of those who did and did not flourish at school.



# Drawing policy inferences

- There are markers of long-term health needs evident during school life.
- These include issues of engagement, flourishing and inclusion as well as qualifications gained.
- Programmes of school-based intervention might be integrated with out-of-school and post-school age interventions to ensure appropriate targeting of resources.
- Encouraging engagement in adult learning could facilitate empowerment, healthy behaviours and health improvements



# Drawing policy inferences

- The people who know the service users are key. They should be highly skilled, highly-trained, well-paid, with high morale, good support and with wide-ranging set of programmes to draw on, as they see fit.
- Engage the curious and train the willing.
- Interventions and investments should be persistent, high quality and appropriate. “Measure us on our outcomes” (Tony Hunter)

